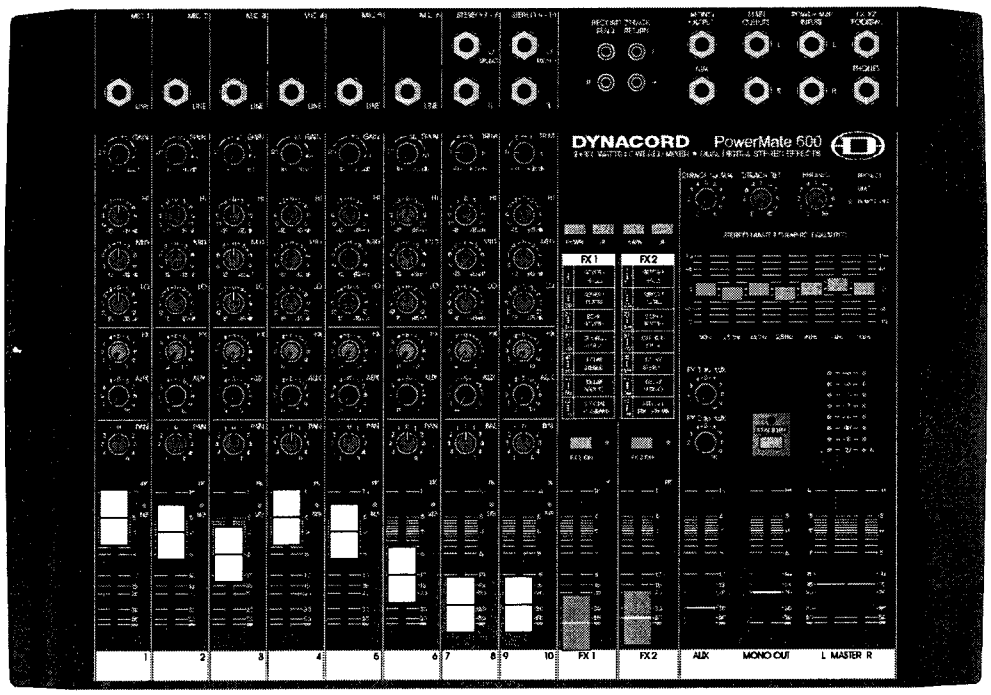
DYNA-00210

DYNACORD®

SERVICE MANUAL

03. 1999



PowerMate 600

POWERED MIXER

Table of Contents

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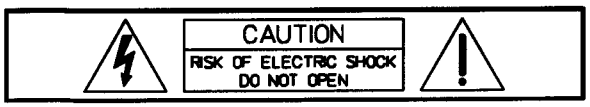
IMPORTANT SAFETY INSTRUCTIONS



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
AVIS: RISQUÉ DE CHOC ELECTRIQUE. NE PAS OUVRIR.

The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintance (servicing) instructions in the literature accompanying the appliance.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a damp cloth.
7. Do not block any of the ventilation openings.
   Install in accordance with the manufactures instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
9. Only use attachments/accessories specified by the manufacturer.
10. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

For US and CANADA only:

Do not defeat the safety purpose of the grounding-type plug. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrican for replacement of the absolete outlet.

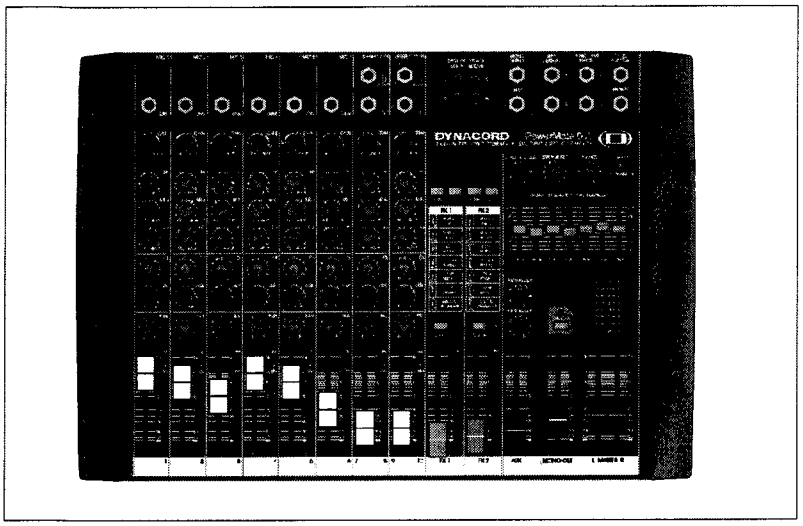
IMPORTANT SERVICE INSTRUCTIONS

CAUTION: These servicing instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the Operating Instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

1. Security regulations as stated in the EN 60065 (VDE 0860 / IEC 65) and the CSA E65 - 94 have to be obeyed when servicing the appliance.
2. Use of a mains separator transformer is mandatory during maintenance while the appliance is opened, needs to be operated and is connected to the mains
3. Switch off the power before retrofitting any extensions, changing the mains voltage or the output voltage.
4. The minimum distance between parts carrying mains voltage and any accessible metal piece (metal enclosure), respectively between the mains poles has to be **3 mm** and needs to be minded at all times.
   The minimum distance between parts carrying mains voltage and any switches or breakers that are not connected to the mains (secondary parts) has to be **6 mm** and needs to be minded at all times.
5. Replacing special components that are marked in the circuit diagram using the security symbol (Note) is only permissible when using original parts.
6. Altering the circuitry without prior consent or advice is not legitimate.
7. Any work security regulations that are applicable at the location where the appliance is being serviced have to be strictly obeyed. This applies also to any regulations about the work place itself.
8. All instructions concerning the handling of **MOS** - circuits have to be observed.

Note:  **SAFETY COMPONENT (HAS TO BE REPLACED WITH ORIGINAL PART ONLY)**

DYNACORD®



Technische Informationen

Architects and engineers specifications

PowerMate 600

POWERED MIXER

BESCHREIBUNG

Die PowerMate 600 Kompaktanlage basiert auf mehreren Jahrzehnten Erfahrung, Forschung und Kundennähe im professionellen Audiobereich. Hier haben Sie ein Gerät in dem alles optimal aufeinander abgestimmt ist. Durch die ergonomische Pultform und die übersichtlich, strukturierte Anordnung der Bedienteile haben Sie immer alles im Blick und können schnell und problemlos auf jedes Detail zugreifen. Auch beim Transport des PowerMate werden Sie bald seine Vorzüge zu schätzen wissen. Griffe links und rechts im Seitenteil sowie das geringe Gewicht erlauben Ihnen einen problemlosen Transport des Gerätes, wobei alle empfindlichen Teile wie Knöpfe und Regler von einer stabilen Schutzhaube abgedeckt sind. Mit seiner großen Anzahl von Funktionen, hohen Dynamik, rauscharmen Design, dem 18bit-Dual-Stereo-Effektteil und der 2x300W/4Ohm starken Endstufe ist der PowerMate universell einsetzbar. Egal ob auf der Bühne, beim Homerecording oder in der Festinstallation, zeigt sich der PowerMate als idealer Partner und wird Ihre hohen Ansprüche, die Sie natürlich an ein professionelles Audiogerät stellen, souverän und zuverlässig erfüllen.

Die sechs MIC/Line-Kanäle mit ihren elektronisch symmetrierten XLR- und Klinkeneingängen sind mit einem Gainregler zur Anpassung des Eingangspegels und einer Dreibandklangregelung mit perfekt abgestimmten Einsatzfrequenzen ausgestattet. Mit dem FX-Regler wird das Eingangssignal den Effektteilen zugemischt, und mit dem AUX-Regler das Eingangssignal auf die Ausgangsbuchse AUX an den Sie zum Beispiel eine Monitoranlage anschließen. Über den PAN-Regler können Sie die Position des Eingangssignals im Stereopanorama festlegen, die Lautstärke regeln Sie sanft und präzise über die 60mm Fader. Die beiden Kanäle 7/8 und 9/10 sind zusätzliche echte Stereokanäle für den Anschluß von Stereoquellen wie Keyboards, Drummachines, CD-Playern etc. vorgesehen. Darüber hinaus verfügt die PowerMate 600 über einen 2Track send/return für die Verwendung mit Kassettendeck oder MD-Recorder, der auch bei Benutzung der STANDBY Funktion aktiv bleibt, so daß alle normalen Eingangskanäle aus sind, ohne die Reglereinstellungen zu verändern, und das Signal vom Rekorder trotzdem, zum Beispiel für Pausenmusik, verstärkt werden kann. Die Lautstärke wird hierbei über den 2TRACK RET-Regler eingestellt.

Der 7-Band Stereoequalizer erlaubt ein feinfühliges Anpassen der Musik bzw. des zu übertragenden Signals an die akustischen Gegebenheiten des Raumes. Die Einsatzfrequenzen sind dabei so gewählt, daß optimale Ergebnisse erzielt werden können. Ein zusätzlicher Monoausgang und eine Masteranzeige machen die Ausstattung komplett.

DESCRIPTION

The design of the PowerMate 600 compact power mixer is based on decades of experience, research and development as well client inter-communication in the professional audio market. With the PowerMate you own a power mixer that offers a wide range of functionality in a very compact frame. All the troubling experiences with cabling and matching mixers, amplifiers, FX units, and equalizers is history. You now own a device with optimally matched components.

The mixer's ergonomic shape and clearly structured controls allow instant access at all times. Also during the transport you will quickly learn to appreciate the PowerMate's superiority: recessed handles on both sides, compact dimensions and low weight. Additionally, a sturdy dust hood protects the controls against damaging. Through its multiple functions, its high dynamic capacity, and extremely low-noise design in combination with the 18bit-Dual-Stereo effects unit and the high-performance 2x300W/4ohms power amplifier, the PowerMate is best equipped for universal use. No matter, whether on-stage, in a home recording environment or in a permanent installation, DYNACORD's PowerMate is the ideal partner to meet your expectations of a professional audio device - effective and reliable.

The six Mic/Line-channels incorporate electronic balanced XLR-type and jack-type input connectors, gain controls that allow optimally matching the input levels, and 3-band EQ-sections with perfectly tailored start frequencies. The "FX"-control determines the amount of the input signal that is send to the effect units. The "AUX"-control sets the input signal level that is send to the AUX-output, which can be used for the connection of the stage-monitor system. The "PAN"-control allows you to adjust the position of the input signal in the stereo image while the precise and smooth setting of a channel's volume is done via the corresponding 60mm fader control.

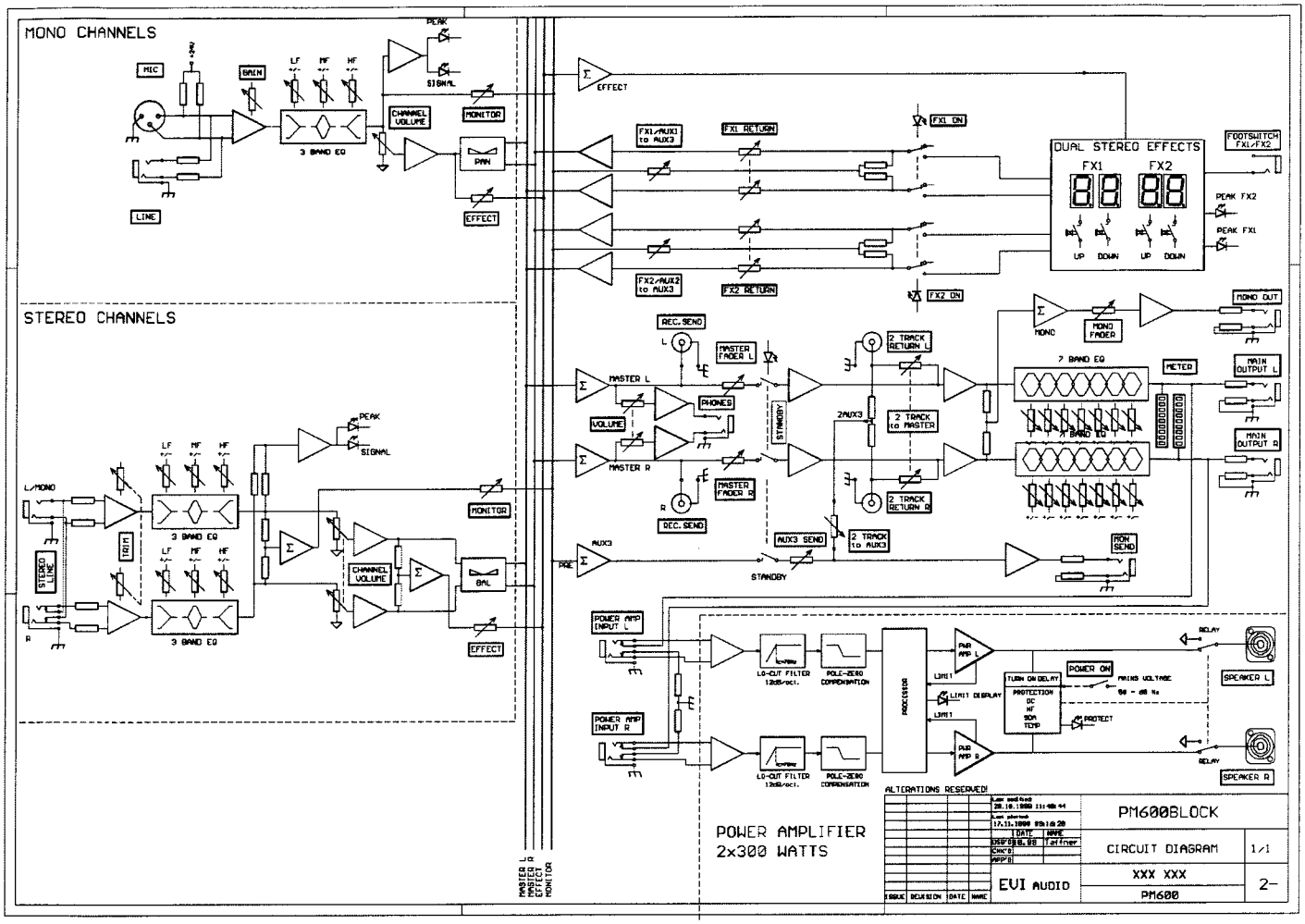
The channel pairs 7/8 and 9/10 are configured as true stereo channels and are meant for the connection of stereo signal sources, like keyboards, drum computers, CD-players, etc. Additionally, the PowerMate 600 has a "2Track send/return" connector which allows the direct feed from cassette decks or MD-recorders. The 2Track send/return stays active even through the PowerMate is set to "STANDBY". In this way all input channels are muted without the need to change the actual fader positions. Nevertheless, the tape deck signal can pass, which for instance provides the possibility to transmit intermission music, where the program's volume is adjusted using the "2TRACK RET"-control. The 7-band stereo equalizer allows precisely matching the transmitted signal to individual environmental and acoustic conditions. The center frequencies of the seven bands are set to values that allow the achievement of optimum results. An additional monaural output and a metering instrument indicating the master level complete the output section.

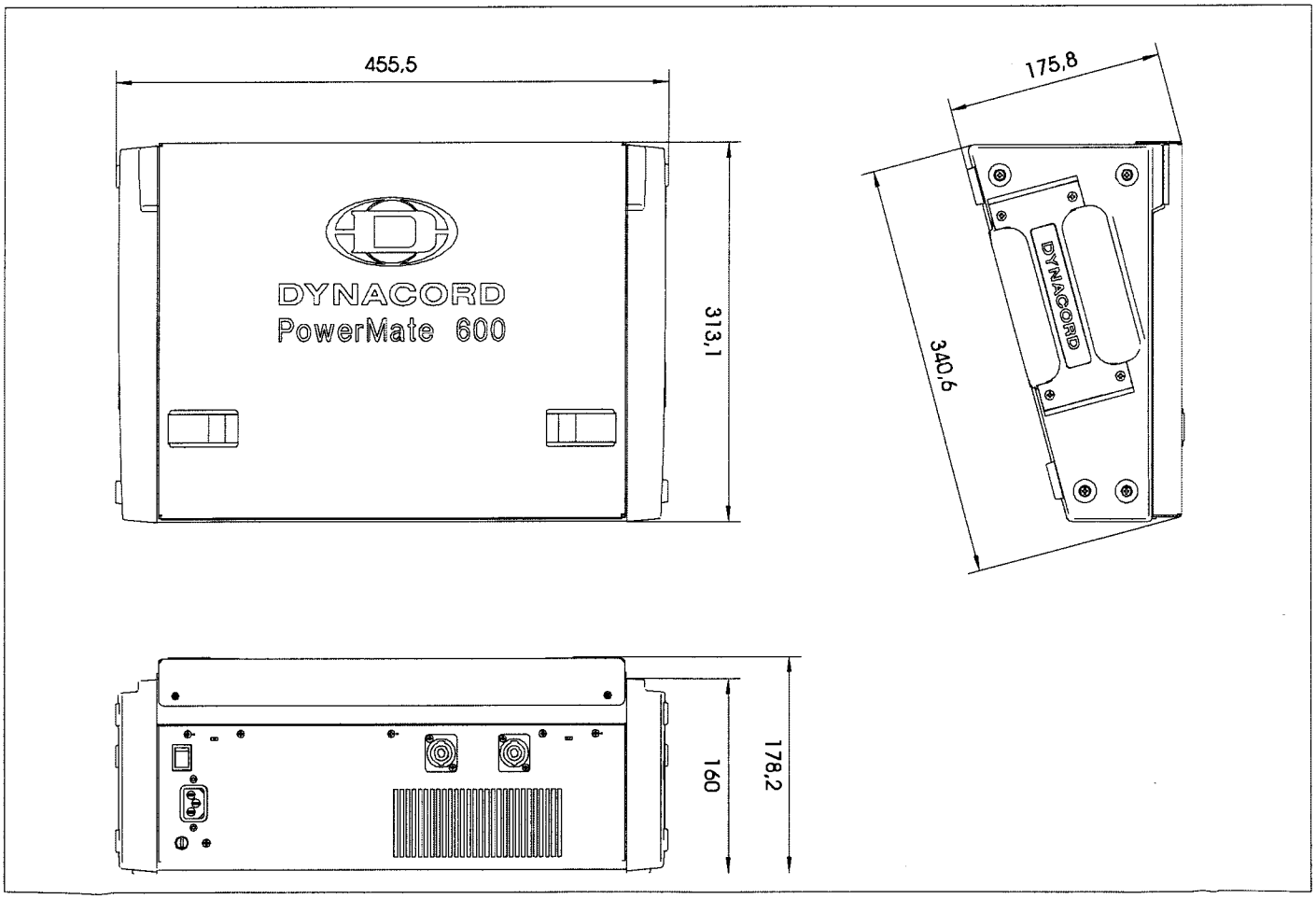
INTRODUCTION

La conception de la PowerMate 600 s'appuie sur des dizaines d'années d'expérience, de recherche et de développement, d'écoute de nos clients du milieu audio professionnel. La PowerMate est une console amplifiée très compacte, mais offrant de nombreuses possibilités. Fini, les problèmes dus au câblage et à l'adaptation entre consoles, amplificateurs, multieffets et égaliseurs ! La PowerMate rassemble tout cela, pour une adaptation optimale. La forme ergonomique de la console et l'organisation claire de sa surface de contrôle permet à tout moment un accès instantané à toutes les commandes. Vous apprécierez également la supériorité de la PowerMate lorsque vous la transporterez : poignées encastrées disposées de chaque côté, compacité, poids modéré. De surcroît, un robuste capot protège les commandes de tout dommage. La PowerMate est vraiment universelle : fonctions multiples, bruit de fond très faible, deux effets 18 bits stéréo et amplificateur incorporé 2x300 Watts (sur 4 Ohms) de hautes performances. Que vous l'utilisiez sur scène, en home studio ou dans le cadre d'une installation fixe, la DYNACORD PowerMate est votre partenaire idéal, efficace et fiable, et satisfera tous les besoins que vous attendez d'une console audio professionnelle. Les six voies micro/ligne possèdent des connecteurs d'entrée symétrisés électroniquement, de type XLR et jack. Les potentiomètres de gain permettent d'adapter le signal d'entrée au niveau de travail interne de la console. Un égaliseur trois voies est également prévu : ses fréquences d'intervention sont parfaitement étudiées. Les potentiomètres "FX" dosent la proportion de signal envoyée aux effets, tandis que les potentiomètres "AUX" autorisent un second mixage, indépendant des généraux, pour des retours de scène par exemple. Le potentiomètre "PAN" place le son précisément dans l'image stéréo. Le fader de 60 mm permet un dosage précis du volume de la voie correspondante dans le mixage final. Les paires de voies 7/8 et 9/10, configurées comme "vraies" voies stéréo, sont prévues pour accueillir des signaux stéréo, claviers, boîtes à rythme, lecteurs de CD, etc. Par ailleurs, la PowerMate 600 dispose de connecteurs permettant de brancher directement un magnéto à cassette ou un MiniDisc, en entrée comme en sortie. Ce retour bipiste reste actif même si la console se trouve en mode Standby : toutes les voies sont alors coupées sans devoir modifier la position de leurs faders, mais le signal provenant du bipiste est quand même affecté aux généraux, ce qui permet de diffuser de la musique pendant les pauses d'un concert – le niveau étant alors réglé via le potenriomètre "2TRACK RET". L'égaliseur graphique stéréo 2x7 bandes permet d'adapter de façon optimale le mixage aux conditions acoustiques dictées par la salle – ses fréquences d'intervention sont spécialement conçues pour résoudre les problèmes les plus fréquents. La section de sortie est complétée par une sortie mono et un VU-mètre indiquant le niveau du signal du bus des généraux.

Technical Specifications PM 600

Maximum Midband Output Power, 1 kHz, THD ≤ 1 %	
into 4 ohms	2 x 340 W
into 8 ohms	2 x 200 W
Rated Output Power, 20Hz... 20 kHz, THD ≤ 0.2%	
into 4 ohms	2 x 300 W
into 8 ohms	2 x 150 W
Maximum Output Level	
of the power amplifier, no load	43 Vrms
THD @ 1 kHz MBW=80kHz	
MIC input to Main L/R output, +16 dBu	< 0.006%
Power amplifier input to speaker output L/R	< 0.08%
DIM 30, power amplifier	< 0.03%
IMD-SMPTE power amplifier, 60Hz, 7 kHz	< 0.2%
Frequency Response, -3dB ref. 1 kHz	
Any input to any mixer output	15Hz... 60kHz
Any input to speaker output L/R	30Hz... 40kHz
Crosstalk, 1 kHz	
Fader and AUX-Send attenuation	> 80 dB
Channel to channel	> 70 dB
CMRR, MIC input, 1 kHz	> 80 dB
Input Sensitivity, all volume controls up	
MIC input	-74 dBu (155µV)
Line input (mono)	-54 dBu (1.55 mV)
Line input (stereo)	-34 dBu (15.5 mV)
Power amplifier input	+6 dBu (1.55 V)
Maximum Input Level, mixer	
MIC inputs	+11 dBu
Line inputs	+30 dBu
All other inputs	+20 dBu
Record Send output	+14 dBu
All other outputs	+20 dBu
Input Impedances	
MIC	1.8 kohms
2-Track Return	10 kohms
All other inputs	> 15 kohms
Output Impedances	
Record Send	1 kohms
Phones	47 ohms
All other outputs	75 ohms
Equivalent Input Noise, MIC Input, A-weighted	-130 dBu
Noise, Channel inputs to Main outputs L/R, A-weighted	
Master fader at minimal setting	-90 dBu
Master fader 0 dB, Channel fader at minimal setting	-89 dBu
Master fader 0 dB, Channel fader 0 dB, Channel gain unity	-83 dBu
Signal/Noise-Ratio, power amplifier, A-weighted	105 dB
Equalization	
LO Shelving	±15 dB / 60 Hz
MID Peaking	±12 dB / 2.4 kHz
HI Shelving	±15 dB / 12 kHz
Master EQ, Stereo 7-band	±10 dB
Phantom Power, all MIC inputs	+24V dc
Power Requirements, factory configured	100V/120V/230V/240V 50Hz....60Hz
Power Consumption	
at 1/8 of the maximum output power at 4 ohms	450 W
Dimensions, (WxHxD), mm	455,5 x 175,8 x 340.6
Weight, including cover	13 kg
Optional accessories	
Rack-Mount-Kit	112 741
Wall-Mount-Kit	112 742
Foot switch FS	110 693


MONO CHANNELS
STEREO CHANNELS
DUAL STEREO EFFECTS
FX1
FX2
POWER AMPLIFIER
2x300 WATTS
PM600BLOCK
CIRCUIT DIAGRAM
1/1
EVI AUDIO
XXX XXX
PM600
2-


455,5
313,1
DYNACORD
PowerMate 600
175,8
340,6
DYNACORD
178,2
160

GARANTIE

Das Werk leistet Garantie für alle nachweisbaren Material- und Fertigungsfehler für die Dauer von 36 Monaten ab Verkauf.
Garantieleistungen werden nur dann anerkannt, wenn gültige, d.h. vollständig ausgefüllte Garantieunterlagen vorliegen.
Von der Garantie ausgenommen sind alle Schäden, die durch falsche oder unsachgemäße Bedienung verursacht werden. Bei Fremdeingriffen oder eigenmächtigen Änderungen erlischt jeder Garantieanspruch.

WARRANTY

The manufacturer's warranty covers all substantial defects in materials and workmanship for a period of 36 months from the date of purchase.
Liability claims are accepted solely, when a valid – correctly and completely filled out – Warranty Registration form is presented by the original owner of the product. The warranty does not cover damage that results from improper or inadequate treatment or maintenance. In case of alteration or unauthorized repairs, the warranty is automatically terminated.

GARANTIE

La garantie constructeur couvre tous les défauts matériels et de main d'œuvre pour une période de 36 mois à compter de la date d'achat. La garantie ne sera reconnue que si la Carte de Garantie, correctement et complètement remplie, est présentée par l'acheteur d'origine du produit. Les dommages dus à un mauvais maniement de l'appareil, à un traitement ou une maintenance incorrects ou inadéquats ne sont pas garantis. Toute modification ou intervention effectuée par une personne non qualifiée entraîne la résiliation automatique de la garantie.

EVI AUDIO GmbH • Hirschberger Ring 45 • 94315 Straubing •Telefon (09421) 706-0 •Telefax (09421) 706-265
Änderungen vorbehalten. Subject to change without prior notice. Printed in Germany 04. 02. 1999 / 356 462
Internet: http:// www.dynacord.de

Measuring Specifications: complete device, PM 600

measuring conditions :

measuring tolerance :	X = 1.5 dB
measuring frequency :	f = 1 kHz
stated levels refer to :	U = 775 mV (0 dBu)
source impedance Line	R(Q) = 50 Ω
source impedance MIC	R(Q) = 150 Ω
load impedance mixer outputs	R(L) = 100 kΩ
load impedance headphones	R(L) = 2 x 200Ω
load impedance power amplifier:	R(L) = 4 , 8Ω
EQ-, PAN-, BAL - controls	center position
FADER	0 dB setting
Gain control	Unity Gain = 0 dB (MIC 20 dB)
AUX-, LEVEL - controls	center position
measuring standards:	IEC 268, IHF-A
security class:	I
test voltage IEC65:	3000 Vrms
U(F) = extraneous voltage	un-weighted with B = 22Hz ... 22 kHz, effective value (IEC 268)
U(G) = noise voltage	frequency-weighting filter according to CCIR-468-3, quasi peak weighted (IEC 268)
U(A) = interference voltage	A-weighted, dB(A), effective value (IEC 268)

- The printed board assemblies 84192/..... are provided with service connectors. The pin-assignment of the service connectors is:

CNS 1	pin-assignment	CNS 2	pin-assignment
1	+ Vcc	1	LIM L
2	BIAS + L	2	-15 V
3	BIAS - L	3	LIM R
4	FAN-Voltage	4	+15 V
5	- Vcc	5	GND
6	BIAS + R	6	+24 V
7	BIAS - R	7	Relay
8	Temp +Heatsink	8	+5 V

1. Operating voltages:

PM 600, Europe	U(B) = 230V / 50Hz ... 60 Hz
PM 600, Japan	U(B) = 100V / 50Hz ... 60 Hz
PM 600, U.S.A./Canada	U(B) = 120V / 50Hz ... 60 Hz
PM 600, Australia	U(B) = 240V / 50Hz ... 60 Hz

2. Operating voltage deviation range: - 30% .... +10%

3. Power and current consumption (both channels driven):

		PM 600	PM 600
	power consumption	current consumption	current consumption
idling	40....60 W	-----	-----
nominal operation (RL=4 ohms)	1000 W	5.0 A / 230 V	9.5 A / 120 V

4. Setting /Adjustments :

4.1. IDLING CURRENT ADJUSTMENT :

Connect the DC-volt meter at the BIAS measuring points (refer to table) and adjust the idling current via the trim potentiometer (on the printed board assemblies 84192 / 84....). Adjust both power amplifier channels LR.

setting	measuring point 1	measuring point 2	U (DC)	BIAS trimmer
BIAS L	CNS 1.2	CNS 1.3	6.5 mV	VR101
BIAS R	CNS 1.6	CNS 1.7	6.5 mV	VR301

Adjusting the idling current has to be performed at normal room temperature. In case the power amplifier had previously been operated, it has to be given several hours to regain normal temperature.
4.3. VCA - OFFSET:
Rhythmically open and short-circuit CNS 2.1 and CNS 2.2 for the left channel and CNS 2.3 and CNS 2.2 for the right channel. The CNS' are located on the printed board assemblies 84192/84.... Use VR100 respectively VR300 to adjust the power amplifier outputs to their minimum offset (with oscilloscope to minimal peak value or to the audible minimal volume of the interfering pulse).

5. Function test :
5.1. OUTPUT - offset voltage
DC-measurement at the loudspeaker outputs LEFT / RIGHT with U(DC) $\leq \pm$ 10mV.

5.2. LIMITER
5.2.1. Attenuation test
Both channels separately driven with a 1 kHz signal and up to U(A) = 40 V (without load). Increase the input voltage by 10 dB. The LIMITER LED lights and the output voltage ascents by approximately 1 dB to approximately 45 V, slightly clipping. The distortion rate of the limited signal is at THD = 1.0 ... 1.5 %. Increasing the input signal up to a value of + 20 dBu should not result in remarkably higher clipping.
5.2.2 . Attack- and Release times
tests have to be performed for both channels of the power amplifier individually: testing has to be performed without load resistors connected.
1.) Drive the power amplifier with a burst signal (f = 1kHz, 10 cycles, Rate : $\approx$ 0.5 sec.) and U(E) = +16dBu at the Power Amp Input.
2.) Monitor the output signal via oscilloscope. After 3 to 4 signal periods, the limiter has controlled the major distortion down to a minor residual distortion (THD = 1% .... 1.5 %).
attack time : 3 - 4 ms
release time: 30 - 40 ms

5.3 POWER-ON DELAY :
Make sure that the signal is present at the power amplifier input. Switch the power amplifier via the Power-On switch on. Approximately 2 seconds after switching the power on, the signal will be present at the output.
The relay E1 which is located on the printed board assembly 84192/2 bridges the NTC-resistor that controls the initial inrush current limiter.

5.4 FAN CONTROL :
Upon switching-on the power amplifier, the fans will run for approximately 2 seconds and stop when the power amplifier has regained its "normal" temperature. In idling condition (power-on, no signal present) the fans are switched between the SLOW and OFF mode, depending on the heat sink's temperature. Removing the connector CN18 lets the fans run in FAST mode. Measuring the fan voltage -5.5 VDC has to be performed between CNS 1.4 and CNS 2.5.

5.5. SOAR-PROTECTION TEST:
Channels separately driven up to 35V at 4Ω . Connect an 1Ω resistor parallel. The protection circuit reacts and tries continuously to re-start! The protect-LED lights. Repeat the test with a 2 ohms resistor. The power amplifier should not switch off.

5.6. SHORT-CIRCUIT CURRENT-LIMITING TEST :
Testing has to be performed for both channels of the power amplifier individually and without load:
- drive each channel with a burst signal (f = 1kHz, 1-3 cycles, rate: 1 sec.), and U(E) = +6dBu and with a load resistor of 1 Ω connected.
- the short-circuit current-limiter limits the output voltage at the load resistor symmetrically (monitor via oscilloscope) to a peak voltage value of 16V - 18V (approx. 16A - 18A maximum peak-current output).

5.7. DC-VOLTAGE PROTECTION TEST :
Only possible when measuring a single printed board assembly.
Individually perform the test for both power amplifier channels:
- feed the power amplifier with a test signal (f = 4 Hz) at FET Q 103, respectively Q 303 Drain and drive the corresponding channel without load resistor connected.

- starting at an input voltage of approximately 10 dBu, the protection circuit reacts and tries continuously to re-start! The Protect-LED lights.
- Repeat the test with f = 14 Hz. The power amplifier should not switch off.

5.8. HF-PROTECTION TEST :

Caution: Perform this test only without load resistors connected to the power amplifier. Feed a +20 dBu sine burst signal **f = 80 - 100 kHz** (40ms ON, 960 ms OFF) to each channel of the power amplifier. The protection circuit has to react. The power amplifier tries to re-start continuously. the PROTECT-LED blinks in the same rhythm.

Repeat the test with **f = 50 kHz**. The power amplifier should not switch off.

6. Level

All level controls within the signal path set to fully open.

Input	U(E)	Output	U(A)	Remarks
MIC Mono	-60 dBu	MAIN OUTPUT L&R	20 dBu	Gain max.
LINE Mono	-60 dBu	SPEAKER L&R	28 dBu	(19.5 V)
LINE Mono	-60 dBu	AUX	+6 dBu	
LINE Mono	-60 dBu	REC. SEND L&R	-16 dBu	
LINE Mono	-60 dBu	PHONES L&R	+2 dBu	
LINE Stereo L/Mono	-34 dBu	MAIN OUTPUT L&R	+6 dBu	
LINE Stereo R	-34 dBu	MAIN OUTPUT R	+6 dBu	
LINE Stereo L/Mono	-34 dBu	AUX	+10 dBu	
LINE Stereo L/Mono	-34 dBu	MONO	+16 dBu	
2 TRACK RET. L&R	-20 dBu	MONO OUTPUT	0 dBu	either L or R
2 TRACK RET. L&R	-20 dBu	AUX	-12 dBu	either L or R
POWER AMP INPUT L&R	+ 6 dBu	SPEAKER L&R	+33 dBu	(34.7 V) signal, without distortion

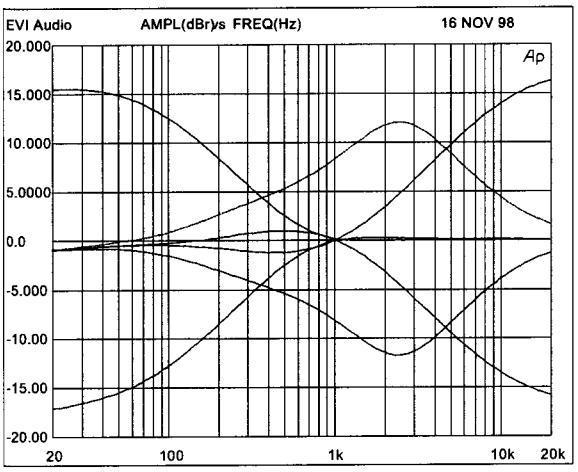
7. Amplitude - Non-linearity

Measuring the power amplifier with 8 ohms load resistors connected and driving a single channel
MBW = 80 kHz,

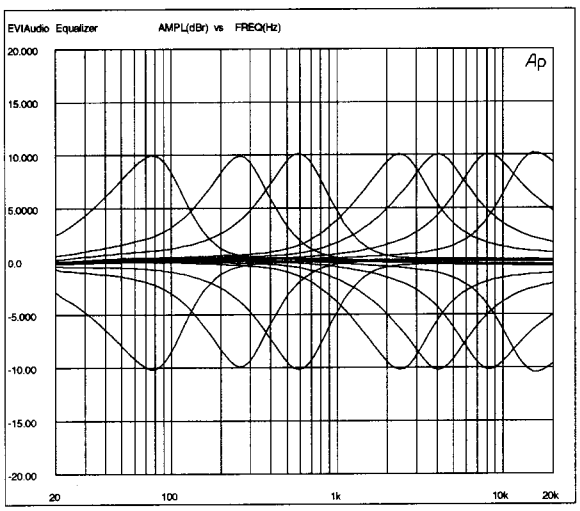
- DIM 30: 3.15 kHz, 15 kHz
- SMPTE: 60 Hz, 7 kHz, 4:1

Input	Output	THD+N at 1kHz	THD+N at 10kHz	DIM 30	SMPTE	Remarks
MIC Mono	MAIN OUT L&R	< 0.006 %	< 0.02 %	< 0.01 %	< 0.01 %	U(A) = 16dBu
LINE Mono	MAIN OUT L&R	< 0.006 %	< 0.02 %	< 0.01 %	< 0.01 %	U(A) = 10 dBu
LINE STEREO	MAIN OUT L&R	< 0.006 %	< 0.02 %	< 0.01 %	< 0.01 %	U(A) = 10 dBu
POWER AMP IN	SPEAKER OUT L&R	< 0.03 %	< 0.1 %	< 0.03 %	< 0.05 %	Pab = 150W

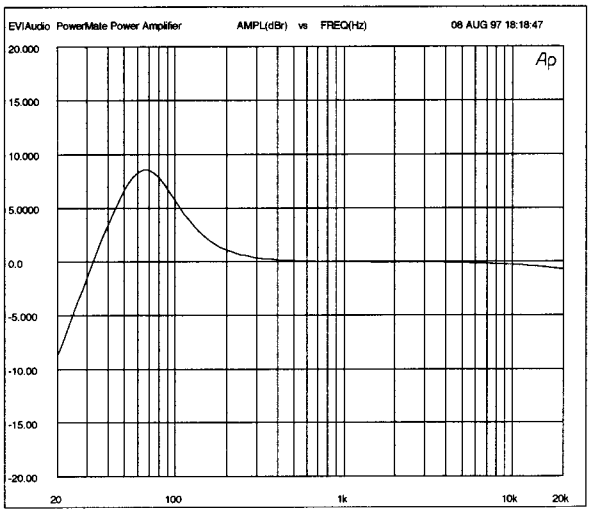
8. Frequency response



EQ Mono / Stereo Input HI / MID / LO



7-BAND EQUALIZER MASTER



Power Amplifier PM 600

8.2. Frequency margins - 3 dB @ 1 kHz

All level controls within the signal path set to fully open.

		PM 600	
Input	Output	f(u)	f(o)
MIC Mono	SPEAKER L&R	38 Hz	45 kHz
LINE Mono	SPEAKER L&R	38 Hz	38 kHz
LINE Stereo	SPEAKER L&R	30 Hz	28 kHz
Power Amp In	SPEAKER L&R	30 Hz	50 kHz
LINE Stereo	AUX	10 Hz	33 kHz
LINE Stereo	MONO OUT	10 Hz	33 kHz
LINE Stereo	REC.SEND	10 Hz	33 kHz

9. Noise interference

- U(F) = extraneous voltage un-weighted with B = 22 Hz ... 22 kHz, effective value (IEC 268-1)
- U(G) = noise voltage, frequency-weighting filter according to CCIR-468-3, quasi peak weighted (IEC 268-1)
- U(A) = interference voltage A-weighted, dB(A), effective value (IEC 268-1)
- Signal-to-noise ratio referenced to a nominal output voltage of 36.9 V (+33.5 dBu) at 4 ohms, respectively 1,55V (+6dBu) at the mixer output with interference voltage A-weighted.

Input	Output	U(F) dBu	U(G) dBu	U(A) dBu	GAIN dB	IN (A)dB u	S/N-Ratio dB	Remarks
Power Amp In	SPEAKER L&R	-70	-59	-72	27	---	105	Power Amp In R(Q) = 50 Ω
----	MAIN OUT	-88	-77	-90	---	---	---	Master closed
----	MAIN OUT	-81	-70	-83	---	---	---	Master open, Channel closed
MIC Mono	MAIN OUT	-47	-36	-49	80	-129	---	MASTER, CHANNEL and Gain open. R(Q) = 150Ω
MIC Mono	MAIN OUT	-75	-64	-77	30	-107	---	MASTER, CHANNEL open and Gain closed. R(Q) = 150Ω
LINE Stereo	MAIN OUT	-46	-35	-48	40	-88	---	MASTER, CHANNEL and Gain open
LINE Stereo	MAIN OUT	-73	-63	-75	10	-85	---	MASTER, CHANNEL open and Gain closed
LINE Mono	MONO OUT	-65	-55	-67	20	-87	---	MONO, MASTER, CHANNEL open and Gain closed
---	AUX	-71	-60	-73	---	---	---	AUX open, CHANNEL closed
---	2 TRACK	-96	-87	-100	---	---	---	CHANNEL closed

10. Operating voltages and service measuring points

Voltages measured at the corresponding pin to GND CNS2.5

84192 84.....	**Power Amp**	**Measured in idling condition**	**interference and ripple voltage U(F)rms**
CNS 1	**Assignment**		
1	+Vcc	+ 65 VDC	50 mVrms
2-3	BIAS L	6.5 mV	-----
4	FAN-Voltage	stage 0: +24 V stage I: +6.5 V stage II: -5.5 V	-----
5	-Vcc	- 65 VDC	50 mVrms
6-7	BIAS R	6.5 mV	-----
8	Temp +Heatsink	variable *1	-----
CNS 2			
1	LIM L	-----	-----
2	-15 V	-15.5 VDC	100 µVrms
3	LIM R	-----	-----
4	+15.5 V	+15.5 VDC	100 µVrms
5	GND	GND	-----
6	+24 V	24...26 VDC	50 µVrms
7	Relay	-24 VDC	-----
8	+5 V	+5 VDC	10 mVrms

*1 see number 11

11. Temperature of the heat sink

DC-voltages measured at CNS 1.8 to CNS 2.5 (GND)

Heat sink temperature	25 °C	40°C	60°C	80°C	100°C	120°C	130°C
	2.5 V	4.3 V	7.2 V	10V	12 V	13.6 V	14.2V

The switch-off point is at approx. 130 °C. The power amplifier enters Protect-Mode.

12. Phantom power

DC-voltages of **+ 24 ... + 26 volts** are present at the XLR-type input connectors; between pin 2 and pin 1, respectively between pin 3 and pin 1.

13. Effect unit

13.1 Level

- FX-control, channel fader, FX-fader, FX1 to AUX, respectively FX2 to AUX, AUX-fader, Master L&R fader at their maximum position.
- FX1 ON-switch, respectively FX2 ON-switch ON. Selected effect program: 0 / 0.

Input	U(E)	Output	U(A)	Remarks
MIC MONO	-40 dBu	MAIN OUTPUT L&R	-3 dBu	Gain min.
MIC MONO	-40 dBu	AUX	-3 dBu	Gain min.
Line STEREO L / MONO	-20 dBu	MAIN OUTPUT L&R	-4.5 dBu	Line Trim min.
Line STEREO L / MONO	-20 dBu	AUX	-4 dBu	Line Trim min.
Line STEREO R	-20 dBu	AUX	-10 dBu	Line Trim min.

13.2 Noise interference

- U(F) = extraneous voltage un-weighted with B = 22 Hz ... 22 kHz, effective value (IEC 268-1)
- U(G) = noise voltage, frequency-weighting filter according to CCIR-468-3, quasi peak weighted (IEC 268-1)
- U(A) = interference voltage A-weighted, dB(A), effective value (IEC 268-1)

Output	U(F)	U(G)	U(A)	Remarks
MAIN OUTPUT L&R	-58 dBu	-49 dBu	-60 dBu	MASTER and FX1 / FX2-faders max. Prog. 0
AUX	-60 dBu	-52 dBu	-64 dBu	AUX-fader, FX1 / FX2 to AUX max. Prog. 0
MAIN OUTPUT L&R	-59 dBu	-49 dBu	-60 dBu	MASTER and FX1-faders max. Prog. 5
MAIN OUTPUT L&R	-58 dBu	-49 dBu	-60 dBu	MASTER and FX2-faders max. Prog.55

13.3 Function test:

Drive the effect units FX1 and FX2, monitor while changing the programs.
7-segment LED-display: All graphs have to be displayed with equal brightness.
The effect unit should not generate digital noise or excessive analog noise in the audio band.
Switching the effects on and off via FX1/2 ON/OFF should not result in switching noise.
Switch the effect on and off via footswitch.

14. Indicators

With the mentioned input voltage applied, the LED begins to light. Gain and FX-controls set to their maximum position.
Tolerance: +/- 2 dB.

Indication	Input	U(E) / dBu
SIGNAL / Mono channel	LINE Mono	- 52
PEAK / Mono channel	LINE Mono	- 26
SIGNAL / Stereo channel	LINE Stereo L/Mono	- 32
PEAK / Stereo channel	LINE Stereo L/Mono	- 6
PEAK FX1/FX2	LINE Mono	- 50

The display in the master section directly indicates the corresponding output level of the MAIN OUT in dBu.
Check the indicated display value of the MAIN OUT for each LED.

Specifications **: PowerMate 600 - complete device**

measuring standard : IEC 268, IHF-A

Level : 0 dBu = 775 mV (RMS) measured frequency : 1kHz

Measuring Conditions

1. Nominal Power Output Capacity:
Gain control set to UNITY GAIN = 0 dB (20 dB MIC), all faders down,
Master fader set to + 6 dB and all rotary controls at their center position.

2. Equivalent Input Noise

Input	source impedance	gain control
LINE	50 ohms	Unity Gain (20dB)
MIC	150 ohms	Gain max.

3. Distortion is generally measured via THD+Noise. The bandwidth (MBW) is 80 kHz.
Mixing Console under nominal condition.

OUT	U(E) at the correspondent input	U(A) at the measured output	frequencies
LINE	+10 dBu	+ 16 dBu	1 kHz, 10 kHz
MIC	- 10 dBu	+ 16 dBu	1 kHz, 10 kHz
Power Amplifier	+ 6 dBu	150 W / 8 ohms	20 Hz .... 20 kHz

4. Frequency response at 20 dB below full modulation.
5. Crosstalk and damping at nominal setting U(A) = 16 dBu with variable band-pass filter.
6. Common mode rejection CMRR (selective with band-pass variable)

Input	U(E)	output	gain control
LINE	+ 16 dBu	Main Out	Unity Gain (20dB)
MIC	- 50 dBu	Main Out	Gain max.

POWER SUPPLY

1. Supply voltage: AC
2. Nominal supply voltage PM 600: 112727: **230 V**; 112...: **240V**; 112... : **100 V**; 112750 : **120 V.**
3. Nominal frequency of the power supply: 50 - 60 Hz
4. Deviation range of the power supply: - 30 % ..... + 10 %
5. Power consumption (both channels driven with a 1 kHz sine signal)

Power consumption with RL = 4 ohms	**PM 600**	**power consumption**
Idling power consumption	40 ... 60 W	
Nominal power consumption	1000 W	230V / 5,0A
Standard power consumption	350 W	230V / 2,0A
Maximum power consumption (THD=1%)	1000 W	230V / 5,0A
Power consumption at 1/8 of the maximum output power (2 x 38 W)	400 W	230V / 2,2A
Power consumption at 1/3 of the maximum output power (2 x 100 W)	590 W	230V / 3,3A

INPUT CHARACTERISTICS
Mixer under nominal condition with nominal output level at the mixer outputs. Input sensitivity, gain, channel faders and master fader set to their max. position.

Input	Nominal input level (dBu)	Input sensitivity	Max. input level (dBu)	Input impedance	Balancing
MIC	- 60 ... - 10	-74dBu(155µV)	+ 11	1.8 k ohms	balanced
MONO LINE	- 40 ... + 10	-54dBu(1,55mV)	+ 30	18 k ohms	balanced
STEREO LINE	- 20 ... + 10	-34dBu(15.5mV)	+ 30	18 k ohms	balanced
POWER AMP	+ 6	+6dBu(1.55V)	+ 20	18 k ohms	balanced
2TRACK RET.	+ 4	-9dBu(275mV)	+ 14	> 8 k ohms	unbalanced

OUTPUT CHARACTERISTICS Mixer

Output	Nominal output level (dBu)	Max. Output level (dBu)	Output impedance	Balancing
MAIN OUT	+ 6	+ 20	75 ohms	GND-Sense
MONO OUT	+ 6	+ 20	75 ohms	GND-Sense
AUX SEND	0	+ 20	75 ohms	GND-Sense
REC. SEND	- 7.8 (- 10 dBV)	+ 16	1 k ohm	unbalanced
PHONES	- 2 / 200 ohms	+ 18 / 200 ohms	47 ohms	unbalanced

OUTPUT CHARACTERISTICS Power Amplifier

Nominal input voltage at the Power Amp In	Nominal load impe-dance	Nominal output power, Single Channel THD < 0.1%	Maximum output power, Single Channel, THD=1%	Max. Single Channel Output Power)1	Nominal output voltage	Max. Idling output voltage	Maximum Output voltage THD=1%
+ 6 dBu	8	150 W	200 W	210 W	34.7 V	43 V	40.0 V
+ 6 dBu	4	300 W	340 W	390 W	34.7 V	43 V	36.9 V

)1 measured with a **Dynamic Headroom-Test Signal** according to IHF-A: 1 kHz Burst, 20ms On, 480 ms Off

STABILIZING of the power amplifier
Single Channel, standard output voltage

	8 ohms	4 ohms
Stabilizing	0.6 %	1.2 %
Stabilizing level	0.05 dB	0.1 dB

FREQUENCY RESPONSES
Amplification frequency response (-3 dB drop compared to the level at the standard frequency of 1kHz) **:**

	f (u) b - 3 dB	f (o) - 3 dB
Any mixer input to any mixer output, better than	15 Hz	60 kHz
Any mixer input to SPEAKER OUT L & R, better than	30 Hz	40 kHz

Distortion-limited transmission rage (power bandwidth) power amplifier:

Input	f (u)	f (o)	Remarks
Power Amp Input	15 Hz	60 kHz	THD=0.4%, 1/2 nominal power at 4 ohms, MBW = 500 kHz

AMPLITUDE NON-LINEARITIES (Single Channel)

Power amplifier Input = Power Amp In	Power amplifier R(L) = 8 ohms	Power amplifier R(L) = 4 ohms	Remarks
Nominal THD	< 0.03 % / < 0.1 %	< 0.1 % / < 0.2 %	MBW=80 kHz, f=1kHz / 10 kHz
Standard THD	< 0.03 % / < 0.03 %	< 0.1% / < 0.1 %	MBW=80 kHz, f=1kHz / 10 kHz
IMD-SMPTE	< 0.05 %	< 0.5 %	60 Hz, 7 kHz

DIM 30	< 0.03 %	< 0.05 %	3.15 kHz, 15 kHz
DIM 100	< 0.03 %	< 0.05 %	3.15 kHz, 15 kHz

Mixer section	**Distortion f = 1 kHz**	**Distortion f = 10 kHz**	**Remarks**
LINE Input -> MAIN OUT	< 0.006 %	< 0.02 %	
LINE Input -> MONO OUT	< 0.006 %	< 0.02 %	
LINE Input -> AUX SEND	< 0.006 %	< 0.02 %	
MIC Input - MAIN OUT	< 0.006 %	< 0.02 %	
2TRACK -> MAIN OUT	< 0.006 %	< 0.015 %	

CROSSTALK AND DAMPING

	f = 1kHz	f = 10 kHz	Remarks
Fader attenuation			
MONO CHANNEL	> 80 dB	> 80 dB	
STEREO CHANNEL	> 80 dB	> 75 dB	
MASTER	> 80 dB	> 80 dB	
MONO	> 80 dB	> 75 dB	
AUX/FX	> 80 dB	> 80 dB	
Control attenuation			
AUX	> 80 dB	> 75 dB	
PAN (BAL)	> 60 dB	> 60 dB	
2 TRACK RETURN	> 90 dB	> 90 dB	
Switch-off attenuation			
STANDBY	> 90 dB	> 80 dB	
Crosstalk			
Power amplifier L/R	> 80dB	> 75 dB	Power Amp In / 8 ohms
Channel - Channel	> 70 dB	> 70 dB	
Common mode rejection			
CMRR MIC	> 80 dB	> 60 dB	
CMRR LINE	> 40 dB	> 40 dB	
CMRR STEREO LINE	> 40 dB	> 40 dB	

NOISE INTERFERENCE

- U(F) = extraneous voltage un-weighted with B = 22 Hz ... 22 kHz, effective value (IEC 268-1)
- U(G) = noise voltage, frequency-weighting filter according to CCIR-468-3, quasi peak weighted (IEC 268-1)
- U(A) = interference voltage A-weighted, dB(A), effective value (IEC 268-1)
- Signal-to-noise ratio referenced to a nominal output voltage of 36.9 V (+33.5 dBu) at 4 ohms, respectively 1,55V (+6dBu) at the mixer output with interference voltage A-weighted.

Measurement	U(F)	U(A)	U(G)	IN (A)	S/N-Ratio(A)	Output	Remarks
Power amplifier	-70 dBu	-72 dBu	-59 dBu	------	105 dB	SPEAKER OUT	Power Amp In, R(Q) = 50 Ω
Residual noise Master	-88 dBu	-90 dBu	-77 dBu	------	96 dB	MAIN OUT	MASTER closed
Noise at the MASTER sum	-88 dBu	-89 dBu	-76 dBu	------	------	MAIN OUT	MASTER open 0dB, Channel closed
typical mixer noise	-81 dBu	-83 dBu	-70 dBu	------	------	MAIN OUT	All faders at 0 dB, Unity Gain
MIC (150 ohms)	-68 dBu	-70 dBu	-57 dBu	130 dBu	------	MAIN OUT	Gain max. (60 dB) Master at 0dB

LINE (50 ohms)	-59 dBu	- 60 dBu	- 47 dBu	100 dBu	------	MAIN OUT	Gain max. (40 dB)

Power amplifier ATTENUATION > 200

Power amplifier SLEW RATE > 20 V/µs

INDICATORS

PEAK / Channel : 6 dB below full modulation
SIGNAL / Channel : 25 dB below PEAK-indication
MAIN 8-segment : 27 dB ... + 6 dB (measured in dBu at the MAIN OUT)
PEAK / FX1/2 : 6 dB below full modulation

PHANTOM POWER : fixed +24V

SOUND SHAPING

	LO (shelving)	MID (peaking)	HI (shelving)
MONO (MIC) INPUT	15 dB / 60 Hz	12 dB / 2.4 kHz Q = 0.7	15 dB / 12 kHz
STEREO (LINE) INPUT	15 dB / 60 Hz	12 dB / 2.4 kHz Q = 0.7	15 dB / 12 kHz

EQUALIZER in the master section

2 x 7 Band : 80 Hz, 250 Hz, 630 Hz, 2.5 kHz, 4 kHz, 8 kHz, 16 kHz; 10 dB, Q = 1.4

EFFECT UNIT 2 separately controllable stereo effect units, 18-Bit, with UP/DOWN keys, each providing 99 preset programs (delay, reverb, modulation and mixed programs)

DIMENSIONS AND WEIGHT

	PM 600 Console	**PM 600 Rack Mount**	**PM 600 Wall Mount**
Width	455.5 mm	483 mm	455.5 mm
Height	175.8 mm	310.3 mm (7 HU)	340.6 mm
Depth	340.6 mm	159 mm	mm
Weight	13 kg	13.5 kg	14 kg

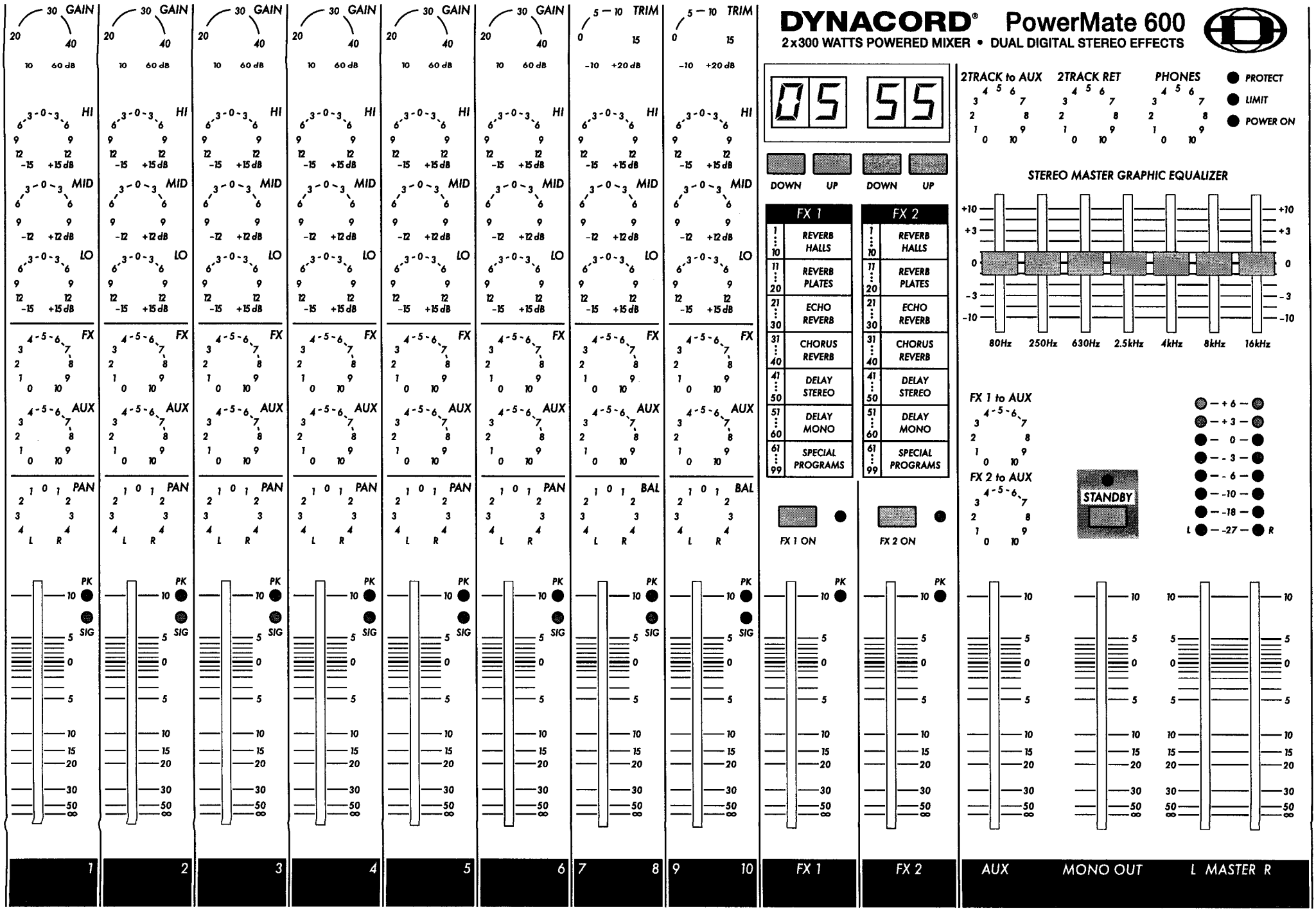
EXTENSIONS

NRS 90 239 Rack-mount ears for the PM 600 No. 112 741
NRS 90 242 Wall-mount kit for the PM 600 No. 112 742

ACCESSORY

DCN 110693 Footswitch FS11

MOUNTING INSTRUCTION when vertically mounting the mixer in a rack-shelf system
To prevent the appliance from suffering from thermal overload, it is necessary to install blind panels with ventilation louvres and with a height of 2 HU each, above and below the PM600. During the operation, both, the front and the rear of the rack-shelf system have to be opened.


DYNACORD® PowerMate 600
2x300 WATTS POWERED MIXER • DUAL DIGITAL STEREO EFFECTS
GAIN
TRIM
HI
MID
LO
FX
AUX
PAN
BAL
PK
SIG
2TRACK to AUX
2TRACK RET
PHONES
PROTECT
LIMIT
POWER ON
STEREO MASTER GRAPHIC EQUALIZER
80Hz 250Hz 630Hz 2.5kHz 4kHz 8kHz 16kHz
DOWN UP DOWN UP
FX 1
FX 2
REVERB HALLS
REVERB PLATES
ECHO REVERB
CHORUS REVERB
DELAY STEREO
DELAY MONO
SPECIAL PROGRAMS
FX 1 ON
FX 2 ON
FX 1 to AUX
FX 2 to AUX
STANDBY
1 2 3 4 5 6 7 8 9 10 FX 1 FX 2 AUX MONO OUT L MASTER R

Ersatzteilliste - Bill of Materials

	112727	PowerMate 600	

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
		Zubehör	**Accessories & packing material**
	356210	BEDIENUNGSANL. POWERM.600	owner's manual pm600
	356308	QUICK START POWERMATE 600	quick start pm600
	300425	KABEL-NETZ 2.0 M 10A	power cable Europe
	356211	KRT. PM.600 515X387X240	carton inner
	356212	STYROPOR-EINL. LI. PM.600	carton filler foam left
	356213	STYROPOR-EINL. RE. PM.600	carton filler foam right
	358175	KRT. PSX 600 AUSSEN	carton outer
	337053	SCHUTZHÜLLE 650X800X0,08	poly bag
		Mechanische Teile	**Cabinet material**
B0010	341343	BUCHSE-SPEAKON-VIERECK 4POL	speaker socket 4-pole
C0001	333014	KO-SO 0.10MF 275V 20% L	safety cap 100nF/275V
G0010	343270	GLRI GBPC 3504	rectifier GBPC-P 3504
	353911	EINLEGEFOLIE POWERM.1000	mylar window
	355153	SK 25X13 WS/SW 4X1,2	knob fader
	355155	SK 25X13 BL/GR 4X1,2	knob fader
	355154	SK 25X13 BL/GR 4X1,2	knob fader
	355156	SK 25X13 RT/GR 4X1,2	knob fader
	353648	SK 7X10 GR 4X1,2	knob fader
	353879	TK 10X5 GR 3,3	push button
	353905	DK 11 GR/GR/RT B 6FL	knob rotary
	353909	DK 11 GR/GR/GR B 6FL	knob rotary
	353907	DK 11 GR/GR/BL B 6FL	knob rotary
	353906	DK 11 GR/GR/BL B 6FL	knob rotary
	348415	LÜFTER TYP FBAO8A24H DC	fan dc 24V
	356237	SEITENTEIL LINKS LACKIERT	side panel left
	356238	SEITENTEIL RECHTS LACKIERT	side panel right
	355513	GRIFF POWERMATE 1000	handle
	355287	BEZ. SCHILD POWERM.-GRIFF	label
	349627	KABEL-KONFEKT 4POL 0.320M	ribbon cable assy 4-way
	346151	KABEL-KONFEKT 4POL 0.065M	ribbon cable assy 4-way
	356643	KABEL-KONFEKT 20POL 0.520M	ribbon cable assy 20-way
	355152	NIPPEL POWERMATE 1000	plastic nipple
	355151	SCHNAPPVERSCHLUSS SER.102	latch top cover
	355986	FB.P-M.600 BED	front panel pm600
	355996	BOD.PM.600 BED	chassis pm600
	356059	DEC.PM.600 BED	top cover
	354955	NT-RG.PM 600 230V	mains transformer 230V
	348341	FEDERLEISTE 3POL CE100-	connector female 3-pole
	348341	FEDERLEISTE 3POL CE100-	connector female 3-pole
		Platinen, bestückt	**Printed circuit boards assy**
	813438	**PCBAR#PM 600**	**pcb assy mixing console**
CN001	349105	MESSERLST. 20POL	connector male 20-pin

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
CN003	348488	FEDERLEISTE 6POL 2.54MM	connector female 6-pole
CN004	348488	FEDERLEISTE 6POL 2.54MM	connector female 6-pole
CN005	348488	FEDERLEISTE 6POL 2.54MM	connector female 6-pole
C0001	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C0002	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C0003	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0004	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C001A	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C001B	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C001C	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C001D	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C001E	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C001F	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C002A	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C002B	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C002C	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C002D	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C002E	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C002F	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C003A	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C003B	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C003C	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C003D	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C003E	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C003F	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C004A	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C004B	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C004C	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C004D	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C004E	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C004F	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C005A	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C005B	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C005C	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C005D	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C005E	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C005F	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C006A	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C006B	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C006C	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C006D	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C006E	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C006F	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C007A	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C007B	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C007C	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C007D	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C007E	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C007F	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C008A	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C008B	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C008C	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C008D	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
C008E	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C008F	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C009A	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C009B	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C009C	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C009D	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C009E	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C009F	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C010A	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C010B	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C010C	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C010D	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C010E	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C010F	301543	KO-KER 330.0PF 500V 10%	cap ceramic 330pF
C011A	346841	KO-EL 47.000MF 16V	cap electrolytic 47uF/16V
C011B	346841	KO-EL 47.000MF 16V	cap electrolytic 47uF/16V
C011C	346841	KO-EL 47.000MF 16V	cap electrolytic 47uF/16V
C011D	346841	KO-EL 47.000MF 16V	cap electrolytic 47uF/16V
C011E	346841	KO-EL 47.000MF 16V	cap electrolytic 47uF/16V
C011F	346841	KO-EL 47.000MF 16V	cap electrolytic 47uF/16V
C012A	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C012B	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C012C	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C012D	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C012E	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C012F	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C013A	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C013B	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C013C	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C013D	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C013E	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C013F	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C014A	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C014B	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C014C	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C014D	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C014E	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C014F	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C015A	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C015B	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C015C	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C015D	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C015E	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C015F	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C016A	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C016B	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C016C	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C016D	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C016E	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C016F	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C017A	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C017B	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C017C	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
C017D	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C017E	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C017F	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C018A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C018B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C018C	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C018D	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C018E	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C018F	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C019A	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C019B	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C019C	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C019D	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C019E	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C019F	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C020A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C020B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C020C	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C020D	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C020E	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C020F	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0200	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C0201	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C0202	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0203	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0204	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C0205	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C0206	335787	KO-KER 15.0PF 100V 2%	cap ceramic 15pF
C0207	335787	KO-KER 15.0PF 100V 2%	cap ceramic 15pF
C0208	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0209	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C021A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C021B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C021C	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C021D	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C021E	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C021F	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0210	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0211	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0212	342937	KO-FOL 1.000MF 63V 5%	cap mylar 1uF
C0213	342937	KO-FOL 1.000MF 63V 5%	cap mylar 1uF
C0214	344105	KO-FOL 0.027MF 100V 5%	cap mylar 27nF
C0215	344105	KO-FOL 0.027MF 100V 5%	cap mylar 27nF
C0216	340244	KO-FOL 0.330MF 63V 5%	cap mylar 330nF
C0217	340244	KO-FOL 0.330MF 63V 5%	cap mylar 330nF
C0218	337181	KO-FOL 0.010MF 100V 5%	cap mylar 10nF
C0219	337181	KO-FOL 0.010MF 100V 5%	cap mylar 10nF
C022A	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C022B	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C022C	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C022D	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C022E	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C022F	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
C0220	354958	KO-FOL 0.180MF 63V 5%	cap mylar 180nF
C0221	354958	KO-FOL 0.180MF 63V 5%	cap mylar 180nF
C0222	327393	KO-FOL 4700.000PF 63V 5%	cap mylar 4700pF
C0223	327393	KO-FOL 4700.000PF 63V 5%	cap mylar 4700pF
C0224	344109	KO-FOL 0.056MF 63V 5%	cap mylar 56nF
C0225	344109	KO-FOL 0.056MF 63V 5%	cap mylar 56nF
C0226	327391	KO-FOL 1500.000PF 100V 5%	cap mylar 1500pF
C0227	327391	KO-FOL 1500.000PF 100V 5%	cap mylar 1500pF
C0228	354957	KO-FOL 0.039MF 100V 5%	cap mylar 39nF
C0229	354957	KO-FOL 0.039MF 100V 5%	cap mylar 39nF
C023A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C023B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C023C	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C023D	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C023E	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C023F	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0230	343397	KO-FOL 1000.000PF 100V2.5%	cap mylar 1nF
C0231	343397	KO-FOL 1000.000PF 100V2.5%	cap mylar 1nF
C0232	344104	KO-FOL 0.018MF 100V 5%	cap mylar 18nF
C0233	344104	KO-FOL 0.018MF 100V 5%	cap mylar 18nF
C0234	328365	KO-FOL 560.000PF 100V 5%	cap mylar 560pF
C0235	328365	KO-FOL 560.000PF 100V 5%	cap mylar 560pF
C0236	337181	KO-FOL 0.010MF 100V 5%	cap mylar 10nF
C0237	337181	KO-FOL 0.010MF 100V 5%	cap mylar 10nF
C0238	300050	KO-FOL 330.000PF 100V 5%	cap mylar 330pF
C0239	300050	KO-FOL 330.000PF 100V 5%	cap mylar 330pF
C024A	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C024B	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C024C	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C024D	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C024E	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C024F	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C0240	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C0241	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C0242	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C0243	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C0244	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0245	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0246	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0247	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0248	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0249	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C025A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C025B	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C025C	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C025D	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C025E	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C025F	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0250	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0251	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0252	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0253	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0254	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
C0255	335787	KO-KER 15.0PF 100V 2%	cap ceramic 15pF
C0256	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C0257	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0258	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0259	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0260	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C0261	335787	KO-KER 15.0PF 100V 2%	cap ceramic 15pF
C0262	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0263	335787	KO-KER 15.0PF 100V 2%	cap ceramic 15pF
C0264	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0265	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C0266	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0267	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0268	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0269	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C027A	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C027B	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C027C	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0270	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0271	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0272	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0273	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0274	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0275	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0276	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0277	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0278	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0279	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C028A	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C028B	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C028C	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0280	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0281	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0282	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0283	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0284	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0285	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0286	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0288	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0289	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C029A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C029B	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C029C	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0290	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0291	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0292	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0293	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0294	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0295	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0296	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0297	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0298	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0299	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
C030A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C030B	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C030C	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0300	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C0301	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0302	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0303	301566	KO-KER 2200.0PF 100V 10%	cap ceramic 2200pF
C0304	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C0305	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C031A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C031B	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C031C	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C032A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C032B	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C032C	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0323	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C033A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C033B	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C033C	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C034A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C034B	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C034C	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C035A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C035B	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C035C	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C035D	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C035E	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C035F	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0350	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0351	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0352	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0353	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0354	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0355	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0356	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0357	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0358	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0359	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0360	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0361	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0362	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0363	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0364	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0365	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0366	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0367	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0370	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0371	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0372	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0373	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0376	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0377	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0378	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
C0379	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0380	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0381	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0382	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C0400	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C0402	340521	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
C0403	340521	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
C050A	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C050B	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C051A	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C051B	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C052A	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C052B	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C053A	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C053B	345461	KO-KER 680.0PF 100V 10%	cap ceramic 680pF
C054A	306059	KO-KER 3.9PF 500V0.25	cap ceramic 3.9pF
C054B	306059	KO-KER 3.9PF 500V0.25	cap ceramic 3.9pF
C055A	306059	KO-KER 3.9PF 500V0.25	cap ceramic 3.9pF
C055B	306059	KO-KER 3.9PF 500V0.25	cap ceramic 3.9pF
C056A	306059	KO-KER 3.9PF 500V0.25	cap ceramic 3.9pF
C056B	306059	KO-KER 3.9PF 500V0.25	cap ceramic 3.9pF
C057A	306059	KO-KER 3.9PF 500V0.25	cap ceramic 3.9pF
C057B	306059	KO-KER 3.9PF 500V0.25	cap ceramic 3.9pF
C058A	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C058B	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C059A	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C059B	354031	KO-EL 470.000MF 10V	cap electrolytic 470uF/10V
C060A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C060B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C061A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C061B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C062A	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C062B	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C063A	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C063B	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C064A	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C064B	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C065A	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C065B	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C066A	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C066B	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C067A	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C067B	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C068A	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C068B	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C069A	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C069B	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C070A	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C070B	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C071A	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C071B	342934	KO-FOL 0.033MF 100V 5%	cap mylar 33nF
C072A	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C072B	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
C073A	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C073B	342932	KO-FOL 0.015MF 100V 5%	cap mylar 15nF
C074A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C074B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C075A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C075B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C076A	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C076B	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C077A	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C077B	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C078A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C078B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C079A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C079B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C080A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C080B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C081A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C081B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C082A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C082B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C083A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C083B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C084A	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C084B	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C085A	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C085B	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C086A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C086B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C087A	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C087B	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C088A	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C089A	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C090A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C091A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C092A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C093A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C094A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C095A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C108A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C108B	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C110A	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C110B	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C111A	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C111B	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C112A	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C112B	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
D001A	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D001B	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D001C	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D001D	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D001E	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D001F	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D002A	301254	DIODE 1N 4148 AXIAL	diode 1N 4148

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
D002B	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D002C	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D002D	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D002E	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D002F	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D004A	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D004B	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D004C	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D004D	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D004E	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D004F	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D005A	354004	LED GN 3MM LOW CURRENT	led green
D005B	354004	LED GN 3MM LOW CURRENT	led green
D005C	354004	LED GN 3MM LOW CURRENT	led green
D005D	354004	LED GN 3MM LOW CURRENT	led green
D005E	354004	LED GN 3MM LOW CURRENT	led green
D005F	354004	LED GN 3MM LOW CURRENT	led green
D006A	354003	LED RT 3MM LOW CURRENT	led red
D006B	354003	LED RT 3MM LOW CURRENT	led red
D006C	354003	LED RT 3MM LOW CURRENT	led red
D006D	354003	LED RT 3MM LOW CURRENT	led red
D006E	354003	LED RT 3MM LOW CURRENT	led red
D006F	354003	LED RT 3MM LOW CURRENT	led red
D007A	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D007B	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D007C	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D007D	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D007E	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D007F	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D008A	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D008B	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D008C	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D008D	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D008E	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D008F	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0200	354003	LED RT 3MM LOW CURRENT	led red
D0201	354003	LED RT 3MM LOW CURRENT	led red
D0202	328788	DIODZ BZX 55C 5V1 0.50W	diode zener 5V1
D0203	354004	LED GN 3MM LOW CURRENT	led green
D0204	354004	LED GN 3MM LOW CURRENT	led green
D0205	329511	DIODZ BZX 55C 2V4 0.50W	diode zener 2V4
D0206	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0207	354003	LED RT 3MM LOW CURRENT	led red
D0208	354004	LED GN 3MM LOW CURRENT	led green
D0209	354003	LED RT 3MM LOW CURRENT	led red
D0210	354003	LED RT 3MM LOW CURRENT	led red
D0400	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0401	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0402	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0403	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0404	354004	LED GN 3MM LOW CURRENT	led green
D0405	354004	LED GN 3MM LOW CURRENT	led green
D0406	354004	LED GN 3MM LOW CURRENT	led green

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
D0407	354004	LED GN 3MM LOW CURRENT	led green
D0408	354004	LED GN 3MM LOW CURRENT	led green
D0409	354004	LED GN 3MM LOW CURRENT	led green
D0410	354004	LED GN 3MM LOW CURRENT	led green
D0411	354004	LED GN 3MM LOW CURRENT	led green
D0412	354004	LED GN 3MM LOW CURRENT	led green
D0413	354004	LED GN 3MM LOW CURRENT	led green
D0414	354004	LED GN 3MM LOW CURRENT	led green
D0415	354004	LED GN 3MM LOW CURRENT	led green
D0416	354005	LED GE 3MM LOW CURRENT	led yellow
D0417	354005	LED GE 3MM LOW CURRENT	led yellow
D0418	354005	LED GE 3MM LOW CURRENT	led yellow
D0419	354005	LED GE 3MM LOW CURRENT	led yellow
D050A	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D050B	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D051A	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D051B	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D052A	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D052B	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D053A	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D053B	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D054A	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D054B	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D055A	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D055B	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D056A	354004	LED GN 3MM LOW CURRENT	led green
D056B	354004	LED GN 3MM LOW CURRENT	led green
D057A	354003	LED RT 3MM LOW CURRENT	led red
D057B	354003	LED RT 3MM LOW CURRENT	led red
E0400	356745	RELAIS M4-24H	relay 24V
I001A	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I001B	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I001C	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I002A	331340	IC TL 072 CP 2FACH OP	IC TL 072 CP
I002B	331340	IC TL 072 CP 2FACH OP	IC TL 072 CP
I002C	331340	IC TL 072 CP 2FACH OP	IC TL 072 CP
I003A	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I003B	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I003C	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I004A	343502	IC LM 2901 N	IC LM 2901
I004B	343502	IC LM 2901 N	IC LM 2901
I004C	343502	IC LM 2901 N	IC LM 2901
I0200	354933	IC NJM 2068 D DUAL IN	IC NJM 2068
I0201	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I0202	354931	IC NJM 072 BL SINGLE IN	IC NJM 072
I0203	354931	IC NJM 072 BL SINGLE IN	IC NJM 072
I0204	354931	IC NJM 072 BL SINGLE IN	IC NJM 072
I0205	354931	IC NJM 072 BL SINGLE IN	IC NJM 072
I0206	354931	IC NJM 072 BL SINGLE IN	IC NJM 072
I0207	354931	IC NJM 072 BL SINGLE IN	IC NJM 072
I0208	354931	IC NJM 072 BL SINGLE IN	IC NJM 072
I0209	354931	IC NJM 072 BL SINGLE IN	IC NJM 072
I0210	354934	IC NJM 2068 L SINGLE IN	IC NJM 2068 L

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
I0211	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I0212	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I0213	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I0214	331340	IC TL 072 CP 2FACH OP	IC TL 072 CP
I0215	344864	IC NJM 4556 AD 2-FACH OP	IC NJM 4556 D
I0216	331340	IC TL 072 CP 2FACH OP	IC TL 072 CP
I0217	331340	IC TL 072 CP 2FACH OP	IC TL 072 CP
I0218	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I0400	331340	IC TL 072 CP 2FACH OP	IC TL 072 CP
I0401	343502	IC LM 2901 N	IC LM 2901
I0402	343502	IC LM 2901 N	IC LM 2901
I0403	343502	IC LM 2901 N	IC LM 2901
I0404	343502	IC LM 2901 N	IC LM 2901
I050A	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I051A	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I052A	332985	IC TL 074 CN	IC TL 074 CN
I053A	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I054A	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I055A	343502	IC LM 2901 N	IC LM 2901
JS01A	354000	BUCHSE-FL. XLR 3POL SW	xlr connector female
JS01B	354000	BUCHSE-FL. XLR 3POL SW	xlr connector female
JS01C	354000	BUCHSE-FL. XLR 3POL SW	xlr connector female
JS01D	354000	BUCHSE-FL. XLR 3POL SW	xlr connector female
JS01E	354000	BUCHSE-FL. XLR 3POL SW	xlr connector female
JS01F	354000	BUCHSE-FL. XLR 3POL SW	xlr connector female
JS019	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS02A	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS02B	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS02C	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS02D	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS02E	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS02F	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS200	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS201	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS202	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS203	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS204	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS205	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS206	354002	BUCHSE-CINCH 4X CINCH	connector cinch
JS207	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS50A	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS50B	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS51A	354001	BUCHSE-KOAXIAL-STEREO	phone jack
JS51B	354001	BUCHSE-KOAXIAL-STEREO	phone jack
Q001A	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q001B	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q001C	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q001D	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q001E	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q001F	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q002A	301184	TRANS BC 550 C	transistor BC 550 B
Q002B	301184	TRANS BC 550 C	transistor BC 550 B
Q002C	301184	TRANS BC 550 C	transistor BC 550 B

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
Q002D	301184	TRANS BC 550 C	transistor BC 550 B
Q002E	301184	TRANS BC 550 C	transistor BC 550 B
Q002F	301184	TRANS BC 550 C	transistor BC 550 B
Q003A	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q003B	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q003C	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q003D	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q003E	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q003F	343536	TRANS 2SA 1084 E TO 92	transistor 2SA 1084 E
Q004A	301184	TRANS BC 550 C	transistor BC 550 B
Q004B	301184	TRANS BC 550 C	transistor BC 550 B
Q004C	301184	TRANS BC 550 C	transistor BC 550 B
Q004D	301184	TRANS BC 550 C	transistor BC 550 B
Q004E	301184	TRANS BC 550 C	transistor BC 550 B
Q004F	301184	TRANS BC 550 C	transistor BC 550 B
Q0200	301184	TRANS BC 550 C	transistor BC 550 B
Q0201	301184	TRANS BC 550 C	transistor BC 550 B
Q0203	330264	TRANS J 111	transistor J 111 A
Q0204	330264	TRANS J 111	transistor J 111 A
Q0205	330264	TRANS J 111	transistor J 111 A
Q0206	330264	TRANS J 111	transistor J 111 A
Q0207	301184	TRANS BC 550 C	transistor BC 550 B
Q0208	301184	TRANS BC 550 C	transistor BC 550 B
Q0209	306928	TRANS BC 560 C	transistor BC 560 C
Q0210	307150	TRANS BC 337-25 TO 92	transistor BC 337-25
Q0400	306928	TRANS BC 560 C	transistor BC 560 C
Q0401	306928	TRANS BC 560 C	transistor BC 560 C
R0375	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm
R0376	340299	WI-SI 2.20 OHM 0.30W 5%	safety resistor 2.20 Ohm
S0002	354006	SCHALTER-RAST 2XUM	switch 2pdt
S0009	354006	SCHALTER-RAST 2XUM	switch 2pdt
S0010	354006	SCHALTER-RAST 2XUM	switch 2pdt
S0201	354008	SCHALTER-TAST 2XUM	switch 2pdt momentary
S0202	354008	SCHALTER-TAST 2XUM	switch 2pdt momentary
S0203	354008	SCHALTER-TAST 2XUM	switch 2pdt momentary
S0204	354008	SCHALTER-TAST 2XUM	switch 2pdt momentary
VR01A	352323	P-DREH 5KOHM LOG NEG XX	pot 5k XX
VR01B	352323	P-DREH 5KOHM LOG NEG XX	pot 5k XX
VR01C	352323	P-DREH 5KOHM LOG NEG XX	pot 5k XX
VR01D	352323	P-DREH 5KOHM LOG NEG XX	pot 5k XX
VR01E	352323	P-DREH 5KOHM LOG NEG XX	pot 5k XX
VR01F	352323	P-DREH 5KOHM LOG NEG XX	pot 5k XX
VR012	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR015	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR018	354262	P-SHIB 10KOHM LOG POS A	fader 10k A
VR02A	352324	P-DREH 50KOHM LIN B	pot 50k B
VR02B	352324	P-DREH 50KOHM LIN B	pot 50k B
VR02C	352324	P-DREH 50KOHM LIN B	pot 50k B
VR02D	352324	P-DREH 50KOHM LIN B	pot 50k B
VR02E	352324	P-DREH 50KOHM LIN B	pot 50k B
VR02F	352324	P-DREH 50KOHM LIN B	pot 50k B
VR020	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR022	354414	P-SHIB 10KOHM SELEKT.AUS	fader 10k A / selected

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
VR001	354262	P-SHIB 10KOHM LOG POS A	fader 10k A
VR023	354414	P-SHIB 10KOHM SELEKT.AUS	fader 10k A / selected
VR001	354262	P-SHIB 10KOHM LOG POS A	fader 10k A
VR03A	352324	P-DREH 50KOHM LIN B	pot 50k B
VR03B	352324	P-DREH 50KOHM LIN B	pot 50k B
VR03C	352324	P-DREH 50KOHM LIN B	pot 50k B
VR03D	352324	P-DREH 50KOHM LIN B	pot 50k B
VR03E	352324	P-DREH 50KOHM LIN B	pot 50k B
VR03F	352324	P-DREH 50KOHM LIN B	pot 50k B
VR04A	352324	P-DREH 50KOHM LIN B	pot 50k B
VR04B	352324	P-DREH 50KOHM LIN B	pot 50k B
VR04C	352324	P-DREH 50KOHM LIN B	pot 50k B
VR04D	352324	P-DREH 50KOHM LIN B	pot 50k B
VR04E	352324	P-DREH 50KOHM LIN B	pot 50k B
VR04F	352324	P-DREH 50KOHM LIN B	pot 50k B
VR05A	354262	P-SHIB 10KOHM LOG POS A	fader 10k A
VR05B	354262	P-SHIB 10KOHM LOG POS A	fader 10k A
VR05C	354262	P-SHIB 10KOHM LOG POS A	fader 10k A
VR05D	354262	P-SHIB 10KOHM LOG POS A	fader 10k A
VR05E	354262	P-SHIB 10KOHM LOG POS A	fader 10k A
VR05F	354262	P-SHIB 10KOHM LOG POS A	fader 10k A
VR06A	352327	P-DREH 2X 10KOHM AC	pot 2x10k AC
VR06B	352327	P-DREH 2X 10KOHM AC	pot 2x10k AC
VR06C	352327	P-DREH 2X 10KOHM AC	pot 2x10k AC
VR06D	352327	P-DREH 2X 10KOHM AC	pot 2x10k AC
VR06E	352327	P-DREH 2X 10KOHM AC	pot 2x10k AC
VR06F	352327	P-DREH 2X 10KOHM AC	pot 2x10k AC
VR07A	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR07B	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR07C	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR07D	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR07E	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR07F	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR08A	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR08B	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR08C	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR08D	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR08E	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR08F	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR201	354930	P-SHIB 2X 10KOHM LIN B	fader 2x10k B
VR202	354930	P-SHIB 2X 10KOHM LIN B	fader 2x10k B
VR203	354930	P-SHIB 2X 10KOHM LIN B	fader 2x10k B
VR204	354930	P-SHIB 2X 10KOHM LIN B	fader 2x10k B
VR205	354930	P-SHIB 2X 10KOHM LIN B	fader 2x10k B
VR206	354930	P-SHIB 2X 10KOHM LIN B	fader 2x10k B
VR207	354930	P-SHIB 2X 10KOHM LIN B	fader 2x10k B
VR208	354262	P-SHIB 10KOHM LOG POS A	fader 10k A
VR209	352329	P-DREH 2X 20KOHM LOG POS K	pot 2x20k K
VR210	352329	P-DREH 2X 20KOHM LOG POS K	pot 2x20k K
VR211	354263	P-SHIB 2X 10KOHM LOG POS A	fader 2x10k A
VR212	354263	P-SHIB 2X 10KOHM LOG POS A	fader 2x10k A
VR50A	352330	P-DREH 2X 5KOHM LOG POS XX	pot 2x5k XX
VR50B	352330	P-DREH 2X 5KOHM LOG POS XX	pot 2x5k XX

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
VR51A	352331	P-DREH 2X 50KOHM LIN B	pot 2x50k B
VR51B	352331	P-DREH 2X 50KOHM LIN B	pot 2x50k B
VR52A	352331	P-DREH 2X 50KOHM LIN B	pot 2x50k B
VR52B	352331	P-DREH 2X 50KOHM LIN B	pot 2x50k B
VR53A	352331	P-DREH 2X 50KOHM LIN B	pot 2x50k B
VR53B	352331	P-DREH 2X 50KOHM LIN B	pot 2x50k B
VR54A	354263	P-SHIB 2X 10KOHM LOG POS A	fader 2x10k A
VR54B	354263	P-SHIB 2X 10KOHM LOG POS A	fader 2x10k A
VR55A	352327	P-DREH 2X 10KOHM AC	pot 2x10k AC
VR55B	352327	P-DREH 2X 10KOHM AC	pot 2x10k AC
VR56A	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR56B	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR57A	352328	P-DREH 20KOHM LOG POS K	pot 20k K
VR57B	352328	P-DREH 20KOHM LOG POS K	pot 20k K

	841928	PCBAR#PM 600	pcb power amp pm600
CN-FX	330269	FL.STECKER 6.3/0.8	connector 6.3mm faston
CNAC1	343516	FL.STECKER 4.8/0.5	connector 4.8mm faston
CNAC2	343516	FL.STECKER 4.8/0.5	connector 4.8mm faston
CNDC+	330269	FL.STECKER 6.3/0.8	connector 6.3mm faston
CNDC-	330269	FL.STECKER 6.3/0.8	connector 6.3mm faston
CNGND	343516	FL.STECKER 4.8/0.5	connector 4.8mm faston
CNGN1	330269	FL.STECKER 6.3/0.8	connector 6.3mm faston
CNS12	354306	STIFTLEISTE 16POL	connector male 16-pin
CN001	349105	MESSERLST. 20POL	connector male 20-pin
CN002	348334	STIFTLEISTE 3POL MLSS	connector male 3-pin
CN008	348334	STIFTLEISTE 3POL MLSS	connector male 3-pin
CN010	330269	FL.STECKER 6.3/0.8	connector 6.3mm faston
CN012	330269	FL.STECKER 6.3/0.8	connector 6.3mm faston
CN014	330269	FL.STECKER 6.3/0.8	connector 6.3mm faston
CN015	330269	FL.STECKER 6.3/0.8	connector 6.3mm faston
CN018	341937	MESSERLST. 4POL	connector male 4-pin
CN18X	341937	MESSERLST. 4POL	connector male 4-pin
C0001	342923	KO-FOL 0.220MF 63V 5%	cap mylar 220nF
C0002	307445	KO-EL 10.000MF 35V	cap electrolytic 10uF/35V
C0003	342923	KO-FOL 0.220MF 63V 5%	cap mylar 220nF
C0005	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0006	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0007	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C0008	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0009	342923	KO-FOL 0.220MF 63V 5%	cap mylar 220nF
C0010	342923	KO-FOL 0.220MF 63V 5%	cap mylar 220nF
C0011	354926	KO-EL 6800.000MF 80V 20%	cap electrolytic 6800uF/80V
C0012	354926	KO-EL 6800.000MF 80V 20%	cap electrolytic 6800uF/80V
C0013	301491	KO-EL 100.000MF 50V	cap electrolytic 100uF/50V
C0014	301491	KO-EL 100.000MF 50V	cap electrolytic 100uF/50V
C0016	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0017	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0018	356661	KO-EL 2200.000MF 35V	cap electrolytic 2200uF/35V
C0019	356661	KO-EL 2200.000MF 35V	cap electrolytic 2200uF/35V
C0020	342923	KO-FOL 0.220MF 63V 5%	cap mylar 220nF
C0021	337237	KO-FOL 0.047MF 100V 5%	cap mylar 47nF
C0022	337237	KO-FOL 0.047MF 100V 5%	cap mylar 47nF

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
C0023	342936	KO-FOL 0.150MF 63V 5%	cap mylar 150nF
C0024	342936	KO-FOL 0.150MF 63V 5%	cap mylar 150nF
C0025	344105	KO-FOL 0.027MF 100V 5%	cap mylar 27nF
C0026	344109	KO-FOL 0.056MF 63V 5%	cap mylar 56nF
C0027	341276	KO-FOL 0.012MF 100V 5%	cap mylar 12nF
C0028	341276	KO-FOL 0.012MF 100V 5%	cap mylar 12nF
C0029	344105	KO-FOL 0.027MF 100V 5%	cap mylar 27nF
C0030	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0031	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0032	341714	KO-SO 0.10MF 275V 20% K	safety cap 100nF/275V
C0033	344109	KO-FOL 0.056MF 63V 5%	cap mylar 56nF
C0034	301453	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C0035	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0036	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0037	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0038	301478	KO-EL 22.000MF 63V	cap electrolytic 22uF/63V
C0039	301478	KO-EL 22.000MF 63V	cap electrolytic 22uF/63V
C0040	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0041	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0042	343534	KO-EL 1000.000MF 16V	cap electrolytic 1000uF/16V
C0043	343534	KO-EL 1000.000MF 16V	cap electrolytic 1000uF/16V
C0044	341920	KO-EL 470.000MF 63V	cap electrolytic 470uF/63V
C0045	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0046	301524	KO-KER 47.0PF 500V 10%	cap ceramic 47pF
C0047	343530	KO-EL 47.000MF 50V	cap electrolytic 47uF/50V
C0048	307445	KO-EL 10.000MF 35V	cap electrolytic 10uF/35V
C0049	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0050	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0051	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0052	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0100	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0101	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0102	301478	KO-EL 22.000MF 63V	cap electrolytic 22uF/63V
C0103	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0104	335787	KO-KER 15.0PF 100V 2%	cap ceramic 15pF
C0105	301458	KO-EL 2.200MF 63V	cap electrolytic 2.2uF/63V
C0106	327390	KO-FOL 470.000PF 100V 5%	cap mylar 470pF
C0107	340988	KO-FOL 0.470MF 63V 5%	cap mylar 470nF
C0108	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C0109	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0110	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0111	342923	KO-FOL 0.220MF 63V 5%	cap mylar 220nF
C0112	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0113	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0114	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0115	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0116	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0117	351994	KO-KER 120.0PF 500V 2%	cap ceramic 120pF
C0118	351994	KO-KER 120.0PF 500V 2%	cap ceramic 120pF
C0119	301458	KO-EL 2.200MF 63V	cap electrolytic 2.2uF/63V
C0120	356605	KO-FOL 0.100MF 250V 5%	cap mylar 100nF
C0123	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C0124	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
C0125	301474	KO-EL 22.000MF 16V BIP	cap bip electr. 22uF/16V
C0126	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0127	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0128	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0129	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0300	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0301	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0302	301478	KO-EL 22.000MF 63V	cap electrolytic 22uF/63V
C0303	301558	KO-KER 33.0PF 100V 2%	cap ceramic 33pF
C0304	335787	KO-KER 15.0PF 100V 2%	cap ceramic 15pF
C0305	301458	KO-EL 2.200MF 63V	cap electrolytic 2.2uF/63V
C0306	327390	KO-FOL 470.000PF 100V 5%	cap mylar 470pF
C0307	340988	KO-FOL 0.470MF 63V 5%	cap mylar 470nF
C0308	301530	KO-KER 100.0PF 500V 10%	cap ceramic 100pF
C0309	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0310	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0311	342923	KO-FOL 0.220MF 63V 5%	cap mylar 220nF
C0312	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0313	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0314	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0315	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0316	343532	KO-EL 100.000MF 25V	cap electrolytic 100uF/25V
C0317	351994	KO-KER 120.0PF 500V 2%	cap ceramic 120pF
C0318	351994	KO-KER 120.0PF 500V 2%	cap ceramic 120pF
C0319	301458	KO-EL 2.200MF 63V	cap electrolytic 2.2uF/63V
C0320	356605	KO-FOL 0.100MF 250V 5%	cap mylar 100nF
C0323	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C0324	301519	KO-KER 10.0PF 500V 10%	cap ceramic 10pF
C0325	301474	KO-EL 22.000MF 16V BIP	cap bip electr. 22uF/16V
C0326	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0327	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0328	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
C0329	329021	KO-KER 0.10MF 100V 20%	cap ceramic 100nF
D0001	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0002	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0003	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0004	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0005	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0006	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0007	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0008	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0010	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0011	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0012	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0013	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0014	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0015	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0016	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0017	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0018	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0019	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0020	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0021	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
D0022	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0023	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0024	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0025	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0026	304992	DIODZ BZX 55C 6V8 0.50W	diode zener 6V8
D0027	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0028	354928	DIODZ 1N 5363B 30V 5.00W	diode zener 30V/5W
D0100	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0101	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0102	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0104	329511	DIODZ BZX 55C 2V4 0.50W	diode zener 2V4
D0105	309450	DIODZ BZX 55C 15V 0.50W	diode zener 15V
D0106	309450	DIODZ BZX 55C 15V 0.50W	diode zener 15V
D0107	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0108	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0109	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0110	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0111	307916	DIODZ BZX 55C 7V5 0.50W	diode zener 7V5
D0112	307916	DIODZ BZX 55C 7V5 0.50W	diode zener 7V5
D0113	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0114	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0115	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0116	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0117	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0300	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0301	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0302	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0304	329511	DIODZ BZX 55C 2V4 0.50W	diode zener 2V4
D0305	309450	DIODZ BZX 55C 15V 0.50W	diode zener 15V
D0306	309450	DIODZ BZX 55C 15V 0.50W	diode zener 15V
D0307	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0308	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0309	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0310	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0311	307916	DIODZ BZX 55C 7V5 0.50W	diode zener 7V5
D0312	307916	DIODZ BZX 55C 7V5 0.50W	diode zener 7V5
D0313	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0314	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0315	304360	DIODE 1N 4007 GEGURTET	diode 1N 4002
D0316	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
D0317	301254	DIODE 1N 4148 AXIAL	diode 1N 4148
E0001	356656	RELAIS 845-N-2C-S-24VDC	relay 24V
E0100	354859	RELAIS 793-P-1C-S-24V DC	relay 24V
E0300	354859	RELAIS 793-P-1C-S-24V DC	relay 24V
F0001	302583	SICHER T 1.6 A 250V	fuse 1.6A slow blow
F0002	302583	SICHER T 1.6 A 250V	fuse 1.6A slow blow
F0003	302573	SICHER T 6.3 A 250V	fuse 6.3A slow blow
H0001	343456	DICKS-NETZW. 8PIN 2%	res.network 8x4k7
H0003	343456	DICKS-NETZW. 8PIN 2%	res.network 8x4k7
H0101	343457	DICKS-NETZW. 8PIN 2%	res.network 8x10k
H0301	343457	DICKS-NETZW. 8PIN 2%	res.network 8x10k
I0001	332985	IC TL 074 CN	IC TL 074 CN
I0004	354199	IC SPNG.REGL. LM 317 T	IC LM 317 voltage regulator

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
I0005	354929	IC SPNG.REGL. LM 337 T	IC LM 337 voltage regulator
I0006	309719	IC SPNG.REGL. LM 340T05	IC MC 7805 C
I0100	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I0101	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I0102	307421	IC CA 3080 E OTA	IC CA 3080 E
I0103	354919	IC OP 97 FP	IC OP 97
I0104	332985	IC TL 074 CN	IC TL 074 CN
I0300	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I0301	327197	IC NE 5532 P 2FACH OP	IC NE 5532 N
I0302	307421	IC CA 3080 E OTA	IC CA 3080 E
I0303	354919	IC OP 97 FP	IC OP 97
I0304	332985	IC TL 074 CN	IC TL 074 CN
JS001	338835	STECKER-KALTGERÄTE	connector male mains
L0001	354450	DROSSEL 150.00UH/0.70A	inductor 150uH
L0100	348592	FILTERSP. 2.50UH/0.004OHM	coil 2.5uH
L0300	348592	FILTERSP. 2.50UH/0.004OHM	coil 2.5uH
Q0001	306928	TRANS BC 560 C	transistor BC 560 C
Q0002	306928	TRANS BC 560 C	transistor BC 560 C
Q0003	306928	TRANS BC 560 C	transistor BC 560 C
Q0004	306928	TRANS BC 560 C	transistor BC 560 C
Q0005	306928	TRANS BC 560 C	transistor BC 560 C
Q0006	301236	TRANS BD 241 B	transistor BD 241 B
Q0007	348422	TRANS MPSA 42	transistor MPSA 42
Q0008	307150	TRANS BC 337-25 TO 92	transistor BC 337-25
Q0009	301184	TRANS BC 550 C	transistor BC 550 B
Q0010	307150	TRANS BC 337-25 TO 92	transistor BC 337-25
Q0011	307150	TRANS BC 337-25 TO 92	transistor BC 337-25
Q0012	348591	TRANS BC 618 DARL. TO 92	transistor BC 618
Q0013	307150	TRANS BC 337-25 TO 92	transistor BC 337-25
Q0023	348591	TRANS BC 618 DARL. TO 92	transistor BC 618
Q0100	348421	TRANS 2N 3906	transistor 2N 3906
Q0101	335763	TRANS 2N 3904	transistor 2N 3904
Q0103	330264	TRANS J 111	transistor J 111 A
Q0104	335763	TRANS 2N 3904	transistor 2N 3904
Q0105	348421	TRANS 2N 3906	transistor 2N 3906
Q0106	348422	TRANS MPSA 42	transistor MPSA 42
Q0107	348423	TRANS MPSA 92	transistor MPSA 92
Q0108	335763	TRANS 2N 3904	transistor 2N 3904
Q0109	348421	TRANS 2N 3906	transistor 2N 3906
Q0110	348422	TRANS MPSA 42	transistor MPSA 42
Q0111	348423	TRANS MPSA 92	transistor MPSA 92
Q0112	335763	TRANS 2N 3904	transistor 2N 3904
Q0113	348421	TRANS 2N 3906	transistor 2N 3906
Q0114	335763	TRANS 2N 3904	transistor 2N 3904
Q0115	348421	TRANS 2N 3906	transistor 2N 3906
Q0116	338869	TRANS MJE 350	transistor MJE 350
Q0117	338868	TRANS MJE 340	transistor MJE 340
Q0118	348409	TRANS 2SC 4793	transistor 2SC 4793
Q0119	348421	TRANS 2N 3906	transistor 2N 3906
Q0120	335763	TRANS 2N 3904	transistor 2N 3904
Q0121	335763	TRANS 2N 3904	transistor 2N 3904
Q0122	348421	TRANS 2N 3906	transistor 2N 3906
Q0123	328887	TRANS MJE 15030	trans. MJE 15030

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
Q0124	328888	TRANS MJE 15031	trans. MJE 15031
Q0125	328889	TRANS MJ 15003	trans. MJ 15003
Q0126	328890	TRANS MJ 15004	trans. MJ 15004
Q0127	328889	TRANS MJ 15003	trans. MJ 15003
Q0128	328890	TRANS MJ 15004	trans. MJ 15004
Q0135	348422	TRANS MPSA 42	transistor MPSA 42
Q0136	348423	TRANS MPSA 92	transistor MPSA 92
Q0137	348423	TRANS MPSA 92	transistor MPSA 92
Q0138	348422	TRANS MPSA 42	transistor MPSA 42
Q0139	307911	TRANS BF 393	transistor BF 391
Q0140	307911	TRANS BF 393	transistor BF 391
Q0141	348423	TRANS MPSA 92	transistor MPSA 92
Q0142	348423	TRANS MPSA 92	transistor MPSA 92
Q0143	348421	TRANS 2N 3906	transistor 2N 3906
Q0144	348421	TRANS 2N 3906	transistor 2N 3906
Q0145	335763	TRANS 2N 3904	transistor 2N 3904
Q0300	348421	TRANS 2N 3906	transistor 2N 3906
Q0301	335763	TRANS 2N 3904	transistor 2N 3904
Q0303	330264	TRANS J 111	transistor J 111 A
Q0304	335763	TRANS 2N 3904	transistor 2N 3904
Q0305	348421	TRANS 2N 3906	transistor 2N 3906
Q0306	348422	TRANS MPSA 42	transistor MPSA 42
Q0307	348423	TRANS MPSA 92	transistor MPSA 92
Q0308	335763	TRANS 2N 3904	transistor 2N 3904
Q0309	348421	TRANS 2N 3906	transistor 2N 3906
Q0310	348422	TRANS MPSA 42	transistor MPSA 42
Q0311	348423	TRANS MPSA 92	transistor MPSA 92
Q0312	335763	TRANS 2N 3904	transistor 2N 3904
Q0313	348421	TRANS 2N 3906	transistor 2N 3906
Q0314	335763	TRANS 2N 3904	transistor 2N 3904
Q0315	348421	TRANS 2N 3906	transistor 2N 3906
Q0316	338869	TRANS MJE 350	transistor MJE 350
Q0317	338868	TRANS MJE 340	transistor MJE 340
Q0318	348409	TRANS 2SC 4793	transistor 2SC 4793
Q0319	348421	TRANS 2N 3906	transistor 2N 3906
Q0320	335763	TRANS 2N 3904	transistor 2N 3904
Q0321	335763	TRANS 2N 3904	transistor 2N 3904
Q0322	348421	TRANS 2N 3906	transistor 2N 3906
Q0323	328887	TRANS MJE 15030	trans. MJE 15030
Q0324	328888	TRANS MJE 15031	trans. MJE 15031
Q0325	328889	TRANS MJ 15003	trans. MJ 15003
Q0326	328890	TRANS MJ 15004	trans. MJ 15004
Q0327	328889	TRANS MJ 15003	trans. MJ 15003
Q0328	328890	TRANS MJ 15004	trans. MJ 15004
Q0335	348422	TRANS MPSA 42	transistor MPSA 42
Q0336	348423	TRANS MPSA 92	transistor MPSA 92
Q0337	348423	TRANS MPSA 92	transistor MPSA 92
Q0338	348422	TRANS MPSA 42	transistor MPSA 42
Q0339	307911	TRANS BF 393	transistor BF 391
Q0340	307911	TRANS BF 393	transistor BF 391
Q0341	348423	TRANS MPSA 92	transistor MPSA 92
Q0342	348423	TRANS MPSA 92	transistor MPSA 92
Q0343	348421	TRANS 2N 3906	transistor 2N 3906

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
Q0344	348421	TRANS 2N 3906	transistor 2N 3906
Q0345	335763	TRANS 2N 3904	transistor 2N 3904
R0037	348490	WI-SO NTC K 164/100K/J	safety component NTC
R0065	348550	WI-SO NTC 10 OHM K	safety resistor 10 Ohm
R0185	348456	WI-DR 2X 0.22 OHM 5.00W 5%	resistor 2x0.22 Ohm 5 watt
R0188	348456	WI-DR 2X 0.22 OHM 5.00W 5%	resistor 2x0.22 Ohm 5 watt
R0208	348593	WI-SO NTC K 164/2.2K	safety component NTC
R0209	348593	WI-SO NTC K 164/2.2K	safety component NTC
R0223	348590	WI-DR 8.20 OHM 4.00W 5%	resistor 8.20 Ohm 4 watt
R0227	341713	WI-DR 4.70 OHM 4.00W 5%	resistor 4.70 Ohm 4 watt
R0385	348456	WI-DR 2X 0.22 OHM 5.00W 5%	resistor 2x0.22 Ohm 5 watt
R0388	348456	WI-DR 2X 0.22 OHM 5.00W 5%	resistor 2x0.22 Ohm 5 watt
R0408	348593	WI-SO NTC K 164/2.2K	safety component NTC
R0409	348593	WI-SO NTC K 164/2.2K	safety component NTC
R0423	348590	WI-DR 8.20 OHM 4.00W 5%	resistor 8.20 Ohm 4 watt
R0427	341713	WI-DR 4.70 OHM 4.00W 5%	resistor 4.70 Ohm 4 watt
S0001	354927	SCHALTER-NETZ	switch mains
VR100	348486	WI-TRI 47.00 KOHM LIN	pot trim 47k Ohm lin
VR101	348674	WI-TRI 250.00 OHM LIN	pot trim 220 Ohm lin
VR300	348486	WI-TRI 47.00 KOHM LIN	pot trim 47k Ohm lin
VR301	348674	WI-TRI 250.00 OHM LIN	pot trim 220 Ohm lin
00050	303576	SICHER-HALTE-FEDER	fuse clip
00055	328390	SICHER-HALTER FAU	fuse holder
00060	328391	SICHER-HALTER-KAPPE FEK	fuse holder carrier
	804388	**PCB--*PM 1000 N 4**	**pcb assy effects**
C 001	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C 003	340523	KO-EL 22.000MF 16V	cap electrolytic 22uF/16V
C 005	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C 007	342923	KO-FOL 0.220MF 63V 5%	cap mylar 220nF
C 008	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C 012	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C 015	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C 016	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C 019	346841	KO-EL 47.000MF 16V	cap electrolytic 47uF/16V
C 020	346841	KO-EL 47.000MF 16V	cap electrolytic 47uF/16V
C 021	346841	KO-EL 47.000MF 16V	cap electrolytic 47uF/16V
C 023	342933	KO-FOL 0.022MF 100V 5%	cap mylar 22nF
C 025	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C 027	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C 030	340520	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C 031	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C 032	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C 035	346841	KO-EL 47.000MF 16V	cap electrolytic 47uF/16V
C 041	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C 046	340521	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
CN001	342982	STIFTLEISTE 2X 5POL	connector male 2x5-pin
CN002	354230	STIFTLEISTE 6POL TSW-106	connector male 6-pin
CN003	354230	STIFTLEISTE 6POL TSW-106	connector male 6-pin
CN004	354230	STIFTLEISTE 6POL TSW-106	connector male 6-pin
CN005	341937	MESSERLST. 4POL	connector male 4-pin
CN006	341937	MESSERLST. 4POL	connector male 4-pin
CN007	329022	FL.STECKER 6.3/0.8	connector male faston

Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
D 003	348492	DISPLAY LED TDSR 3150 HELL.	display TDSR 3150 G+H
D 004	348492	DISPLAY LED TDSR 3150 HELL.	display TDSR 3150 G+H
D 005	348492	DISPLAY LED TDSR 3150 HELL.	display TDSR 3150 G+H
D 006	348492	DISPLAY LED TDSR 3150 HELL.	display TDSR 3150 G+H
IC005	351726	IC MC 34064	IC MC 34064

EVI AUDIO

Altec Lansing · DDA · Dynacord · Electro Voice
Gauss · InterActive Technology · Klark Teknik
Merlin · Midas · University Sound · Vega

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Phone: ++49 (0) 9421/706-342, Fax: ++49 (0) 9421/706-350

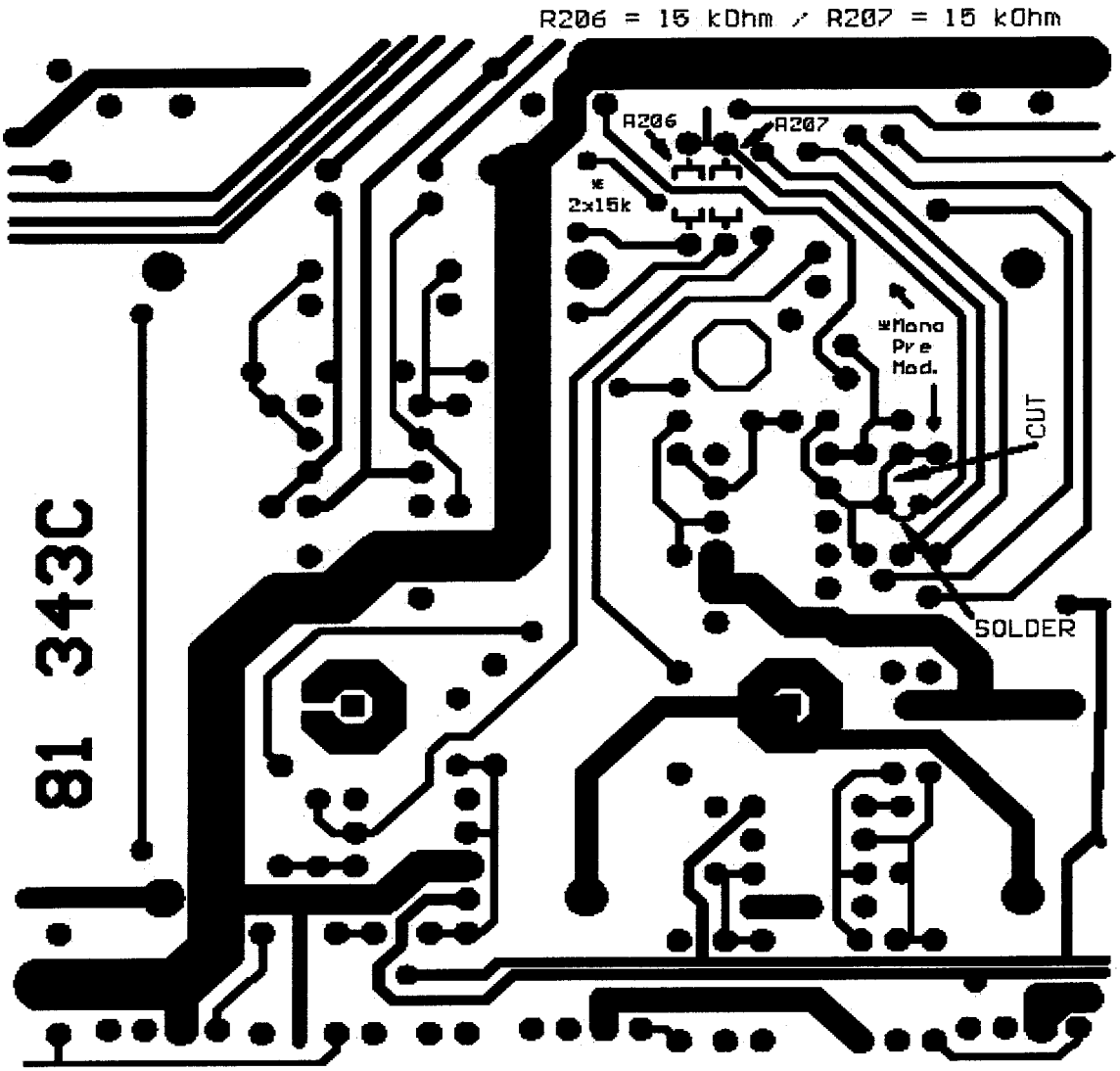
Service Department
Josef Stadler
09.09.99

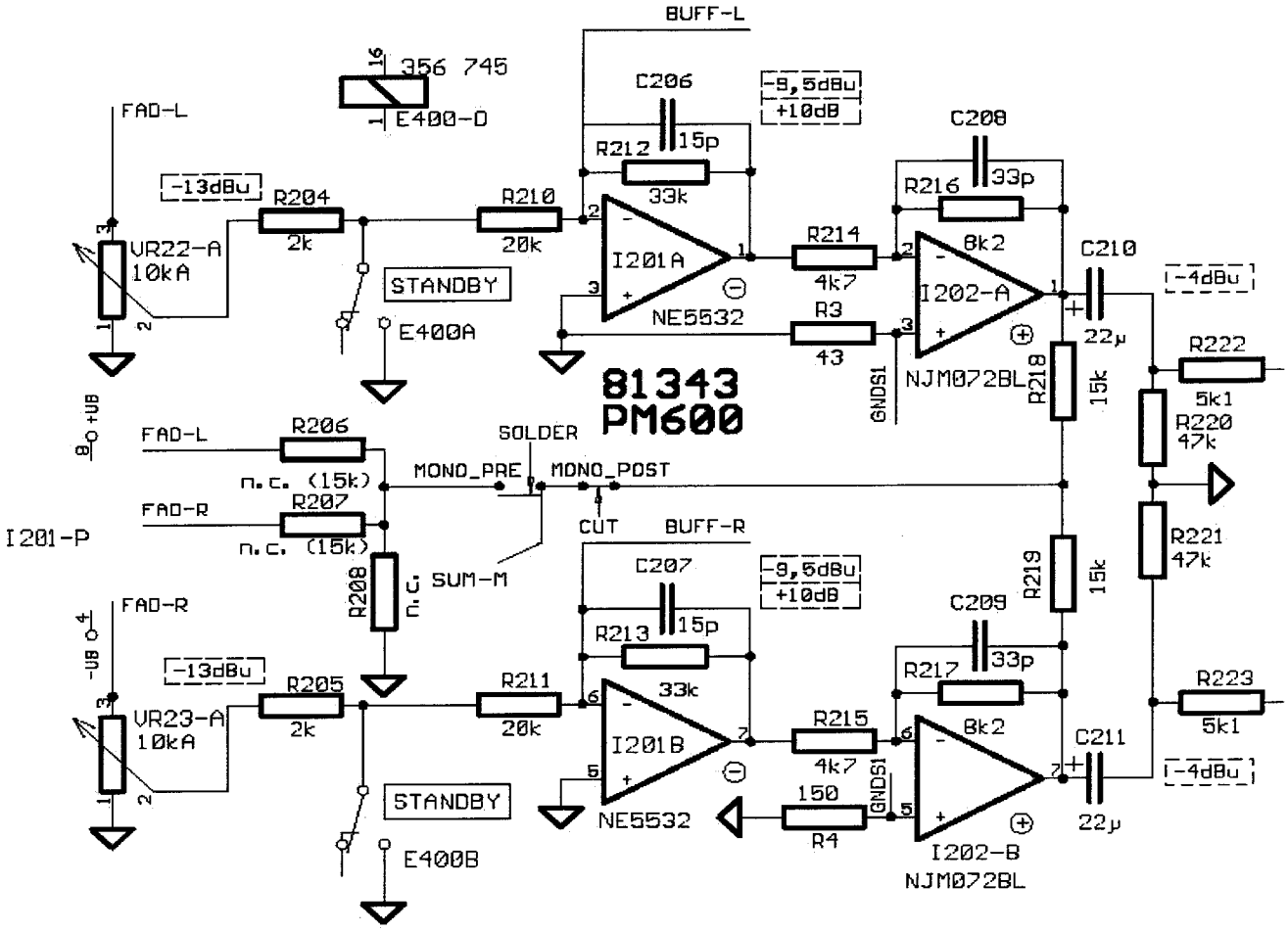
Service Instruction

Product: PowerMate 600
Brand: DYNACORD
Title: Alteration of signal routing: Mono-Output-Signal from post-master-fader to pre-master-fader

To do this alteration, there are to fit 2 resistors and there are to cut one track and to reconnect two solder pads.

1. Disconnect the mains voltage
2. Disassemble the mixing console from the bottom chassis (= power amp & power supply)
3. There is no need to remove the pc-boards from the front panel. The alteration can made from the back side of the pc-board.
4. Attached you will find a small spot of the drawing of the tracks on the back side of the master pcb 81343B. There we have marked the position of two resistors: R206 and R207 (values: 15 kohm). You have to fit these two resistors from the back side of the pcb.
5. Now you have to reroute the signal path. Beside the resistors R218/219 we have marked with an arrow a piece of track. These track you have to cut. For the connection marked "SOLDER" you have to solder a short piece of wire between the two solder pads. For cutting use a sharp knife or a small milling cutter.
6. Re-assemble the unit.


R206 = 15 kOhm / R207 = 15 kOhm
R206
R207
2x15k
*Mono
Pre
Mod.
CUT
SOLDER
81 343C


BUFF-L
356 745
E400-D
C206
-9,5dBu
+10dB
C208
FAD-L
R212
15p
R216
33p
-13dBu
R204
R210
33k
VR22-A
10kA
2k
20k
I201A
R214
8k2
C210
-4dBu
STANDBY
4k7
I202-A
E400A
NE5532
R3
22µ
R222
81343
PM600
43
NJM072BL
R218
15k
5k1
+UB
FAD-L
R206
SOLDER
R220
47k
n.c. (15k)
MONO_PRE
MONO_POST
FAD-R
R207
CUT
BUFF-R
I201-P
n.c. (15k)
R208
n.c.
SUM-M
R221
47k
C207
-9,5dBu
+10dB
R219
15k
C209
FAD-R
R213
15p
R217
33p
-UB
-13dBu
R205
R211
33k
R223
VR23-A
10kA
2k
20k
I201B
R215
8k2
C211
5k1
-4dBu
STANDBY
4k7
150
NE5532
22µ
E400B
R4
I202-B
NJM072BL
GNDS1

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EVI AUDIO

Altec Lansing · DDA · Dynacord · Electro Voice
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Merlin · Midas · University Sound · Vega

EVI Audio GmbH
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Box: 0254 • 94302 Straubing
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Service Department
Josef Stadler
23.10.00

Service Instruction

Product: PowerMate 600
Brand: DYNACORD
Title: Alteration of some resistors on the power amp pcb.

On all units with serial number higher than the listed below the alteration was done by the factory.

PM600 230V serial number: 15773
PM600 240V serial number: 10091
PM600 100V serial number: 10151
PM600 120V serial number: 10091

To do this alteration, there are to replace 6 resistors.

1. Disconnect the mains voltage
2. Disassemble the mixing console from the bottom chassis (= power amp & power supply)
3. On the power amp pcb you should replace the following resistors:
   R23, R27, R95 and R96 (820) with 2.4 kOhms
   R28 and R51 (68) with 100 Ohms
4. Re-assemble the unit.

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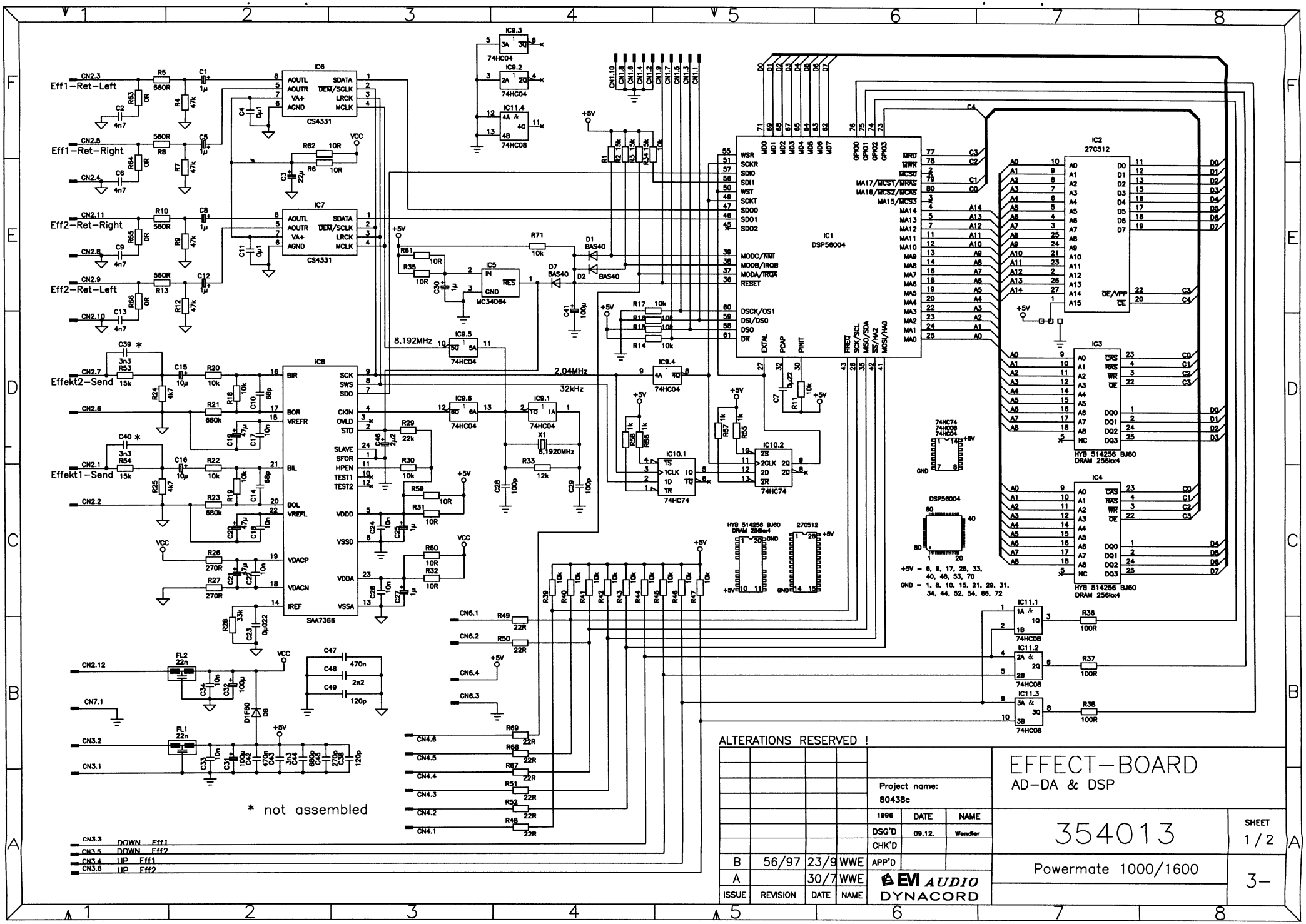
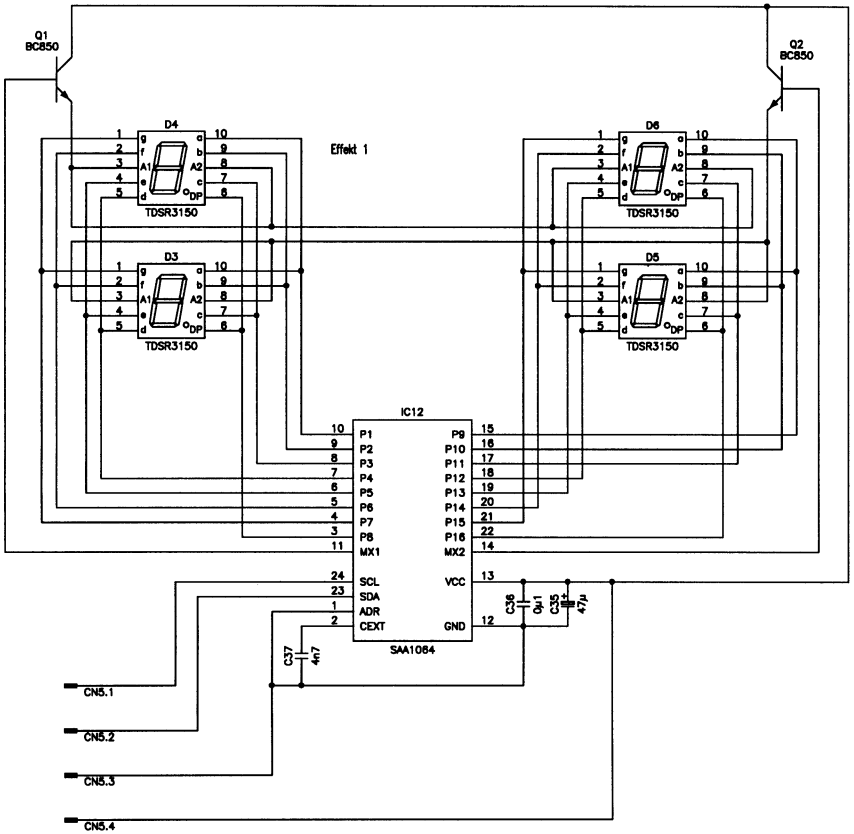

Eff1-Ret-Left
Eff1-Ret-Right
Eff2-Ret-Right
Eff2-Ret-Left
Effekt2-Send
Effekt1-Send
8,192MHz
2,04MHz
32kHz
IC1 DSP56004
IC2 27C512
IC3
IC4
IC5 MC34064
IC6 CS4331
IC7 CS4331
IC8 SAA7366
IC9.1 74HC04
IC9.2 74HC04
IC9.3 74HC04
IC9.4 74HC04
IC9.5 74HC04
IC9.6 74HC04
IC10.1 74HC74
IC10.2 74HC74
IC11.1 74HC08
IC11.2 74HC08
IC11.3 74HC08
HYB 514256 BJ60 DRAM 256kx4
DSP56004
+5V = 6, 9, 17, 28, 33, 40, 48, 53, 70
GND = 1, 8, 10, 15, 21, 29, 31, 34, 44, 52, 54, 66, 72
* not assembled
CN3.3 DOWN Eff1
CN3.5 DOWN Eff2
CN3.4 UP Eff1
CN3.6 UP Eff2
ALTERATIONS RESERVED !
Project name: 80438c
EFFECT-BOARD
AD-DA & DSP
354013
Powermate 1000/1600
SHEET 1/2
3-
B 56/97 23/9 WWE
A 30/7 WWE
ISSUE REVISION DATE NAME
1996 DATE NAME
DSG'D 09.12. Wendler
CHK'D
APP'D
EVI AUDIO DYNACORD



ALTERATIONS RESERVED !

ISSUE	REVISION	DATE	NAME

Project name:
80438c

1997	DATE	NAME
DSG'D	02.04.	Wendler
CHK'D		
APP'D		

EVI AUDIO
DYNACORD

EFFECT–BOARD

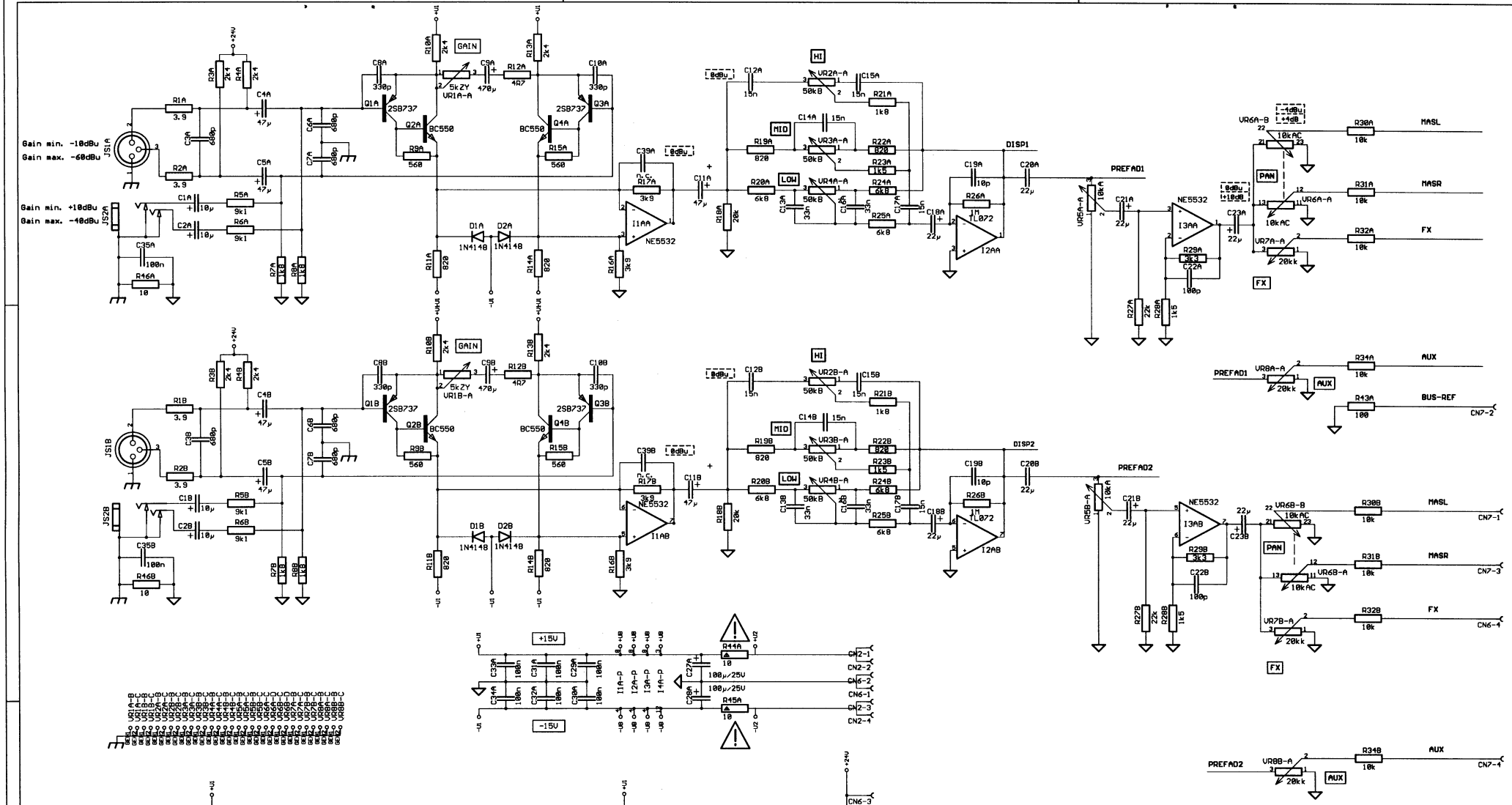
Display

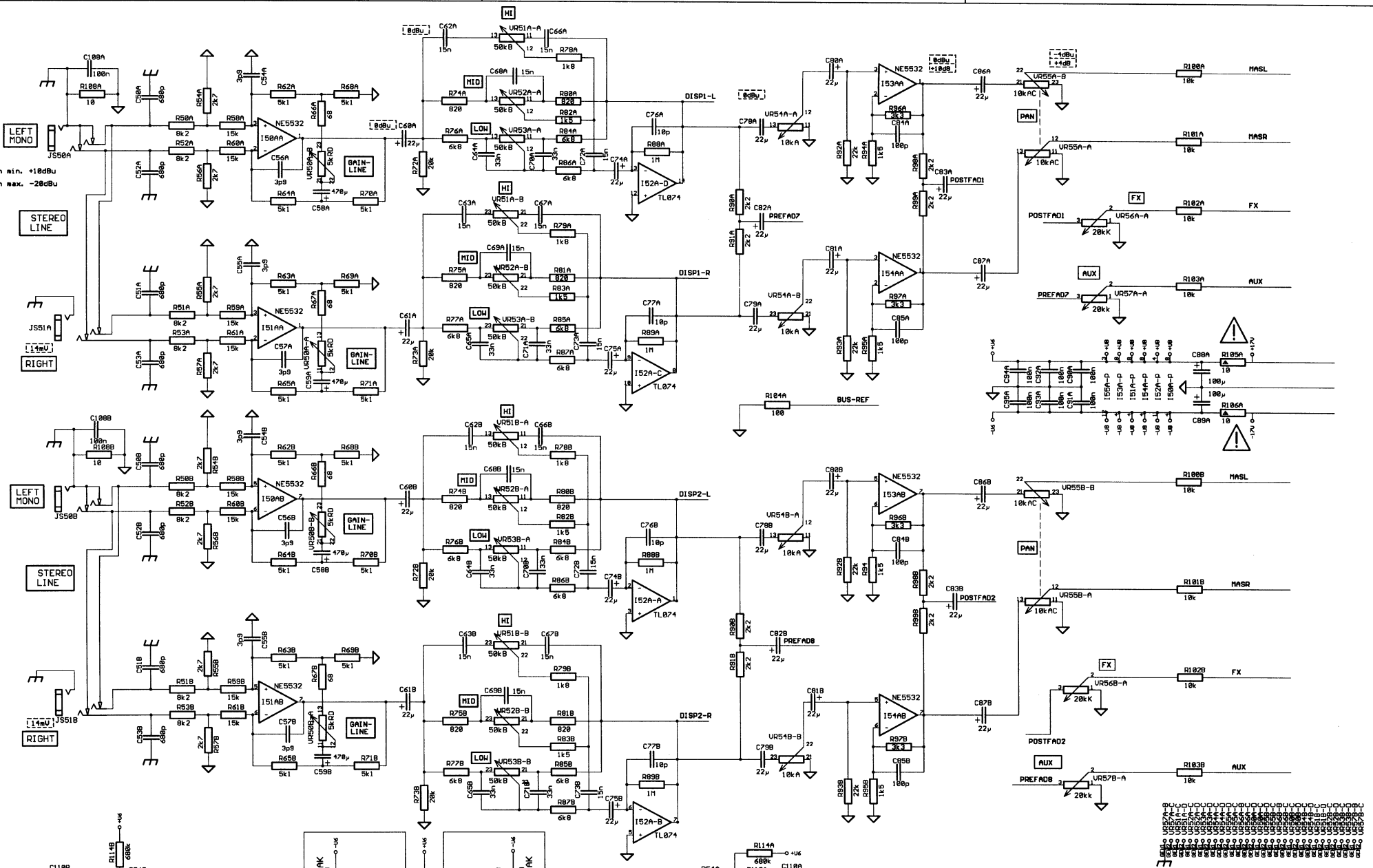
354015

SHEET 2/2

Powermate 1000/1600

4–


Gain min. -10dBu
Gain max. -60dBu
Gain min. +10dBu
Gain max. -40dBu
JS1A
JS2A
JS1B
JS2B
GAIN
VR1A-A
VR1B-A
2SB737
BC550
HI
MID
LOW
VR2A-A
VR3A-A
VR4A-A
VR2B-A
VR3B-A
VR4B-A
50kB
NE5532
TL072
DISP1
DISP2
PREFAD1
PREFAD2
VR5A-A
VR5B-A
VR6A-A
VR6A-B
VR6B-A
VR6B-B
VR7A-A
VR7B-A
VR8A-A
VR8B-A
10kAC
20kk
PAN
FX
AUX
MASL
MASR
BUS-REF
CN7-1
CN7-2
CN7-3
CN7-4
CN6-4
+15V
-15V
CN2-1
CN2-2
CN2-3
CN2-4
CN6-1
CN6-2
CN6-3
LM2901
PEAK
SIGNAL
RED
GREEN
ALTERATIONS RESERVED!
Last modified
18.05.1999 08:25:50
Last plotted
21.05.1999 10:41:39
DATE
NAME
DSG'D
CHK'D
APP'D
81343C
CIRCUIT DIAGRAM
1/5
354 951
2-
EVI AUDIO
ISSUE
REVISION
DATE
NAME
B
57/99
18.05
Stangl
A
4/99
21.01
Stangl



ALTERATIONS RESERVED!

ISSUE	REVISION	DATE	NAME
B	57/99	18.05	Stangl
A	4/99	21.01	Stangl

EVI AUDIO

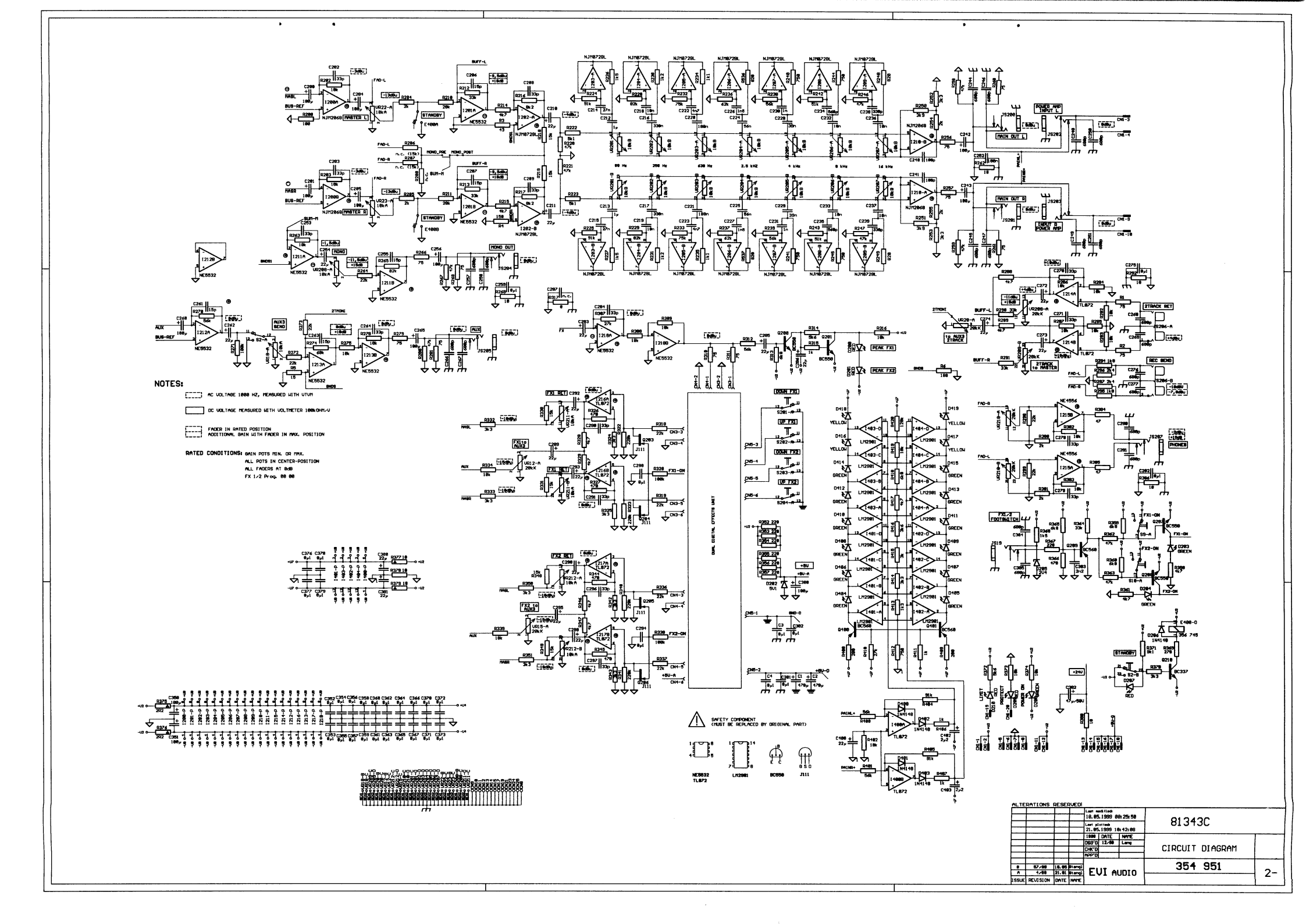
Last modified: 18.05.1999 08:25:50
Last plotted: 21.05.1999 10:41:54

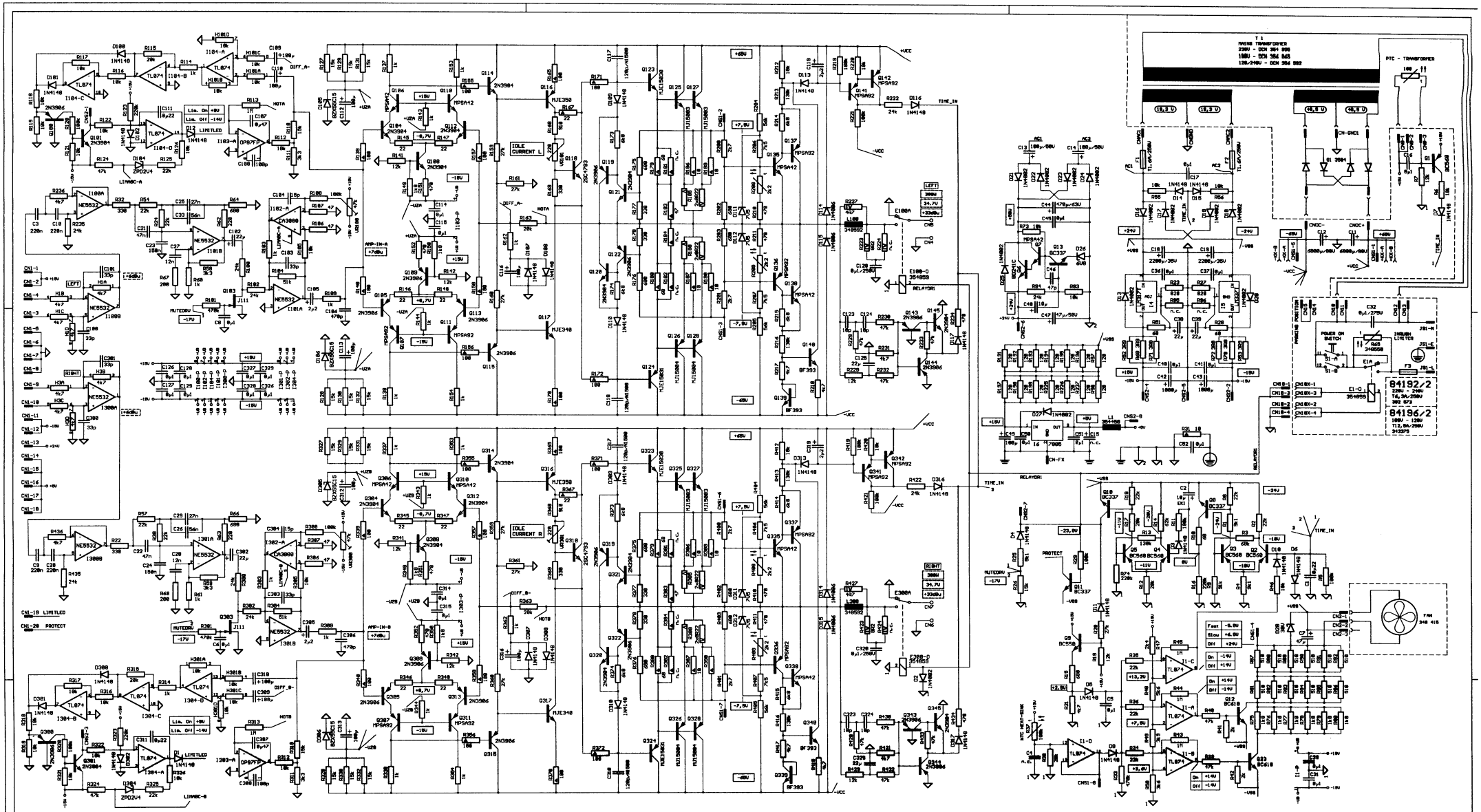
	DATE	NAME
DSG'D		
CHK'D		
APP'D		

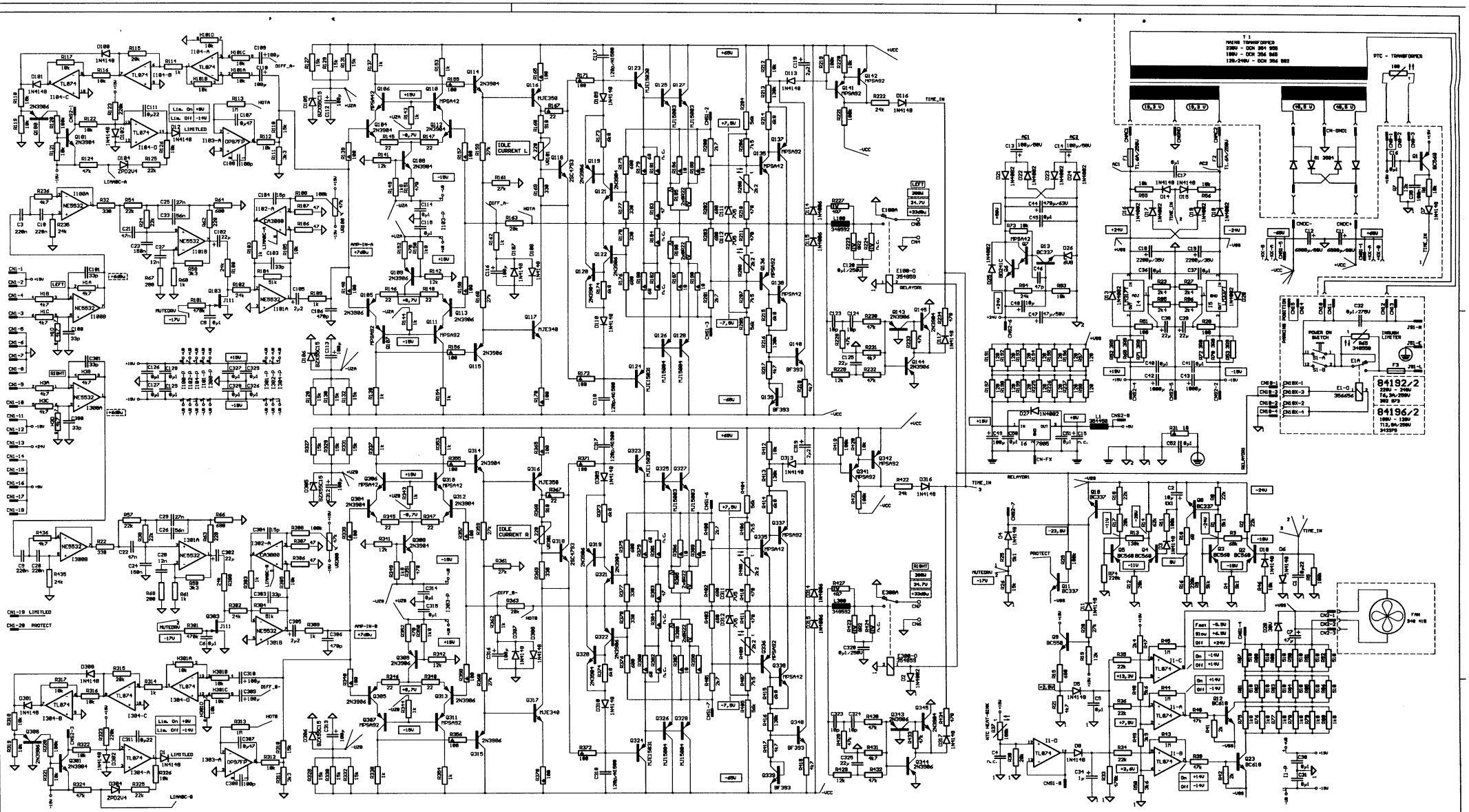
81343C

CIRCUIT DIAGRAM 2/5

354 951 2-

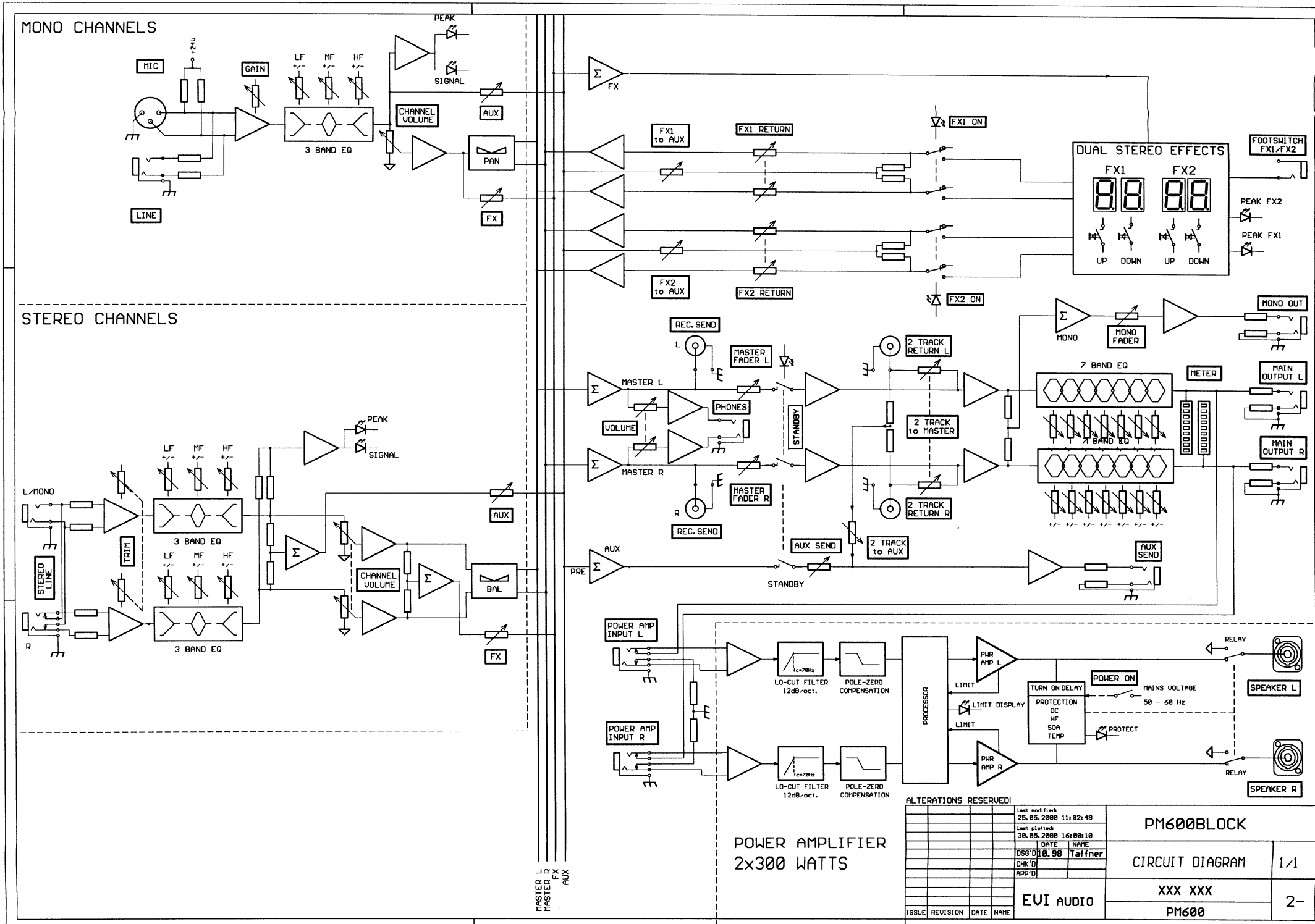

NOTES:
AC VOLTAGE 1000 HZ, MEASURED WITH VTVM
DC VOLTAGE MEASURED WITH VOLTMETER 100kOHM/V
FADER IN RATED POSITION
ADDITIONAL GAIN WITH FADER IN MAX. POSITION
RATED CONDITIONS: GAIN POTS MIN. OR MAX.
ALL POTS IN CENTER-POSITION
ALL FADERS AT 0dB
FX 1/2 Prog. 00 00
SAFETY COMPONENT
(MUST BE REPLACED BY ORIGINAL PART)
NE5532
TL072
LM2901
BC550
J111
ALTERATIONS RESERVED!
81343C
CIRCUIT DIAGRAM
354 951
2-
EVI AUDIO


SAFETY COMPONENT, FLAMEPROOF RESISTOR (MUST BE REPLACED BY ORIGINAL PART)
POWER RESISTOR 1 WATT
AC VOLTAGE 1000 HZ, MEASURED WITH VTVM
DC VOLTAGE MEASURED WITH VOLTMETER 100kOHM/V
AC VOLTAGE 50/60 HZ MEASURED VOLTMETER 2000 OHMS/V
LM 7805
LM 317 T
LM 337 T
MJE 15030 MJE 15031 2SC 4793 BD 241
MJE 340 MJE 350
BC 327 BC 337 BC 556 BC 560 BC 618
MPSA 42 MPSA 92 2N 3904 2N 5306 BF 393
J 111
NE 5532 CA 3080 OP 07 FP
TL 074
MJ 15003 MJ 15004
230V - 240V 84192/1
100V - 120V 84196/1
ALTERATIONS RESERVED!
Last modified 29.04.1999 14:39:08
Last plotted 21.05.1999 10:39:57
1999 DATE NAME
DSG'D 12.10 Stengl
CHK'D
APP'D
84192C
CIRCUIT DIAGRAM
354 953
PowerMate 600
2-
EVI AUDIO
ISSUE REVISION DATE NAME
0 15 / 98 02.98 Stengl
1 Nullserie 01.99 Stengl



230U - 240U 84192/1
100U - 120U 84196/1

ALTERATIONS RESERVED!				Last modified: 05.06.2000 12:17:09	84192d
				Last plotted: 06.06.2000 11:31:02	
				1000 DATE NAME	CIRCUIT DIAGRAM
				DSG'D 12.10 Stangl	
C	53/00	04/00	Stangl	CHK'D	
D	157 / 99	12/00	Lang	APP'D	
C	116 / 99	11/00	Lang		354 953
B	15 / 98	02/00	Stangl	EVI AUDIO	PM600 / PSX600
Nullserie		01/00	Stangl		
ISSUE	REVISION	DATE	NAME		2-


MONO CHANNELS
MIC
+24V
GAIN
LF
MF
HF
+/-
3 BAND EQ
PEAK
SIGNAL
CHANNEL VOLUME
AUX
PAN
FX
LINE
STEREO CHANNELS
L/MONO
TRIM
STEREO LINE
R
3 BAND EQ
PEAK
SIGNAL
AUX
CHANNEL VOLUME
BAL
FX
Σ FX
FX1 to AUX
FX1 RETURN
FX1 ON
FX2 to AUX
FX2 RETURN
FX2 ON
DUAL STEREO EFFECTS
FX1
FX2
UP
DOWN
FOOTSWITCH FX1/FX2
PEAK FX2
PEAK FX1
REC. SEND
L
MASTER FADER L
MASTER L
PHONES
VOLUME
MASTER R
R
MASTER FADER R
REC. SEND
STANDBY
2 TRACK RETURN L
2 TRACK to MASTER
2 TRACK RETURN R
2 TRACK to AUX
AUX SEND
AUX
PRE
STANDBY
MONO
MONO FADER
MONO OUT
7 BAND EQ
METER
MAIN OUTPUT L
MAIN OUTPUT R
POWER AMP INPUT L
POWER AMP INPUT R
LO-CUT FILTER 12dB/oct.
fc=70Hz
POLE-ZERO COMPENSATION
PROCESSOR
LIMIT
LIMIT DISPLAY
PWR AMP L
PWR AMP R
TURN ON DELAY
PROTECTION
DC
HF
SOA
TEMP
POWER ON
MAINS VOLTAGE
50 - 60 Hz
PROTECT
RELAY
SPEAKER L
SPEAKER R
MASTER L
MASTER R
FX
AUX
POWER AMPLIFIER
2x300 WATTS
ALTERATIONS RESERVED!
Last modified: 25.05.2000 11:02:48
Last plotted: 30.05.2000 16:00:10
DSG'D 10.98 Taffner
CHK'D
APP'D
ISSUE
REVISION
DATE
NAME
EVI AUDIO
PM600BLOCK
CIRCUIT DIAGRAM
1/1
XXX XXX
PM600
2-

CN2.3 Eff1-Ret-Left
CN2.5 Eff1-Ret-Right
CN2.4
CN2.11 Eff2-Ret-Right
CN2.8
CN2.9 Eff2-Ret-Left
CN2.10
R5 560R
R8 560R
R10 560R
R13 560R
R63 0R
R64 0R
R65 0R
R66 0R
R4 47k
R7 47k
R9 47k
R12 47k
C1 1µ
C5 1µ
C8 1µ
C12 1µ
C2 4n7
C6 4n7
C9 4n7
C13 4n7
C4 0µ1
C11 0µ1
IC6 CS4331
IC7 CS4331
AOUTL AOUTR VA+ AGND SDATA DEM/SCLK LRCK MCLK
R62 10R
R6 10R
C3 22µ
VCC
+5V
R1 10k
R2 15k
R3 15k
R34 15k
CN1.10 CN1.8 CN1.6 CN1.4 CN1.2 CN1.9 CN1.7 CN1.5 CN1.3 CN1.1
D0 D1 D2 D3 D4 D5 D6 D7
IC9.3 74HC04
IC9.2 74HC04
IC11.4 74HC08
R71 10k
D1 BAS40
D7 BAS40
D2 BAS40
R61 10R
R35 10R
C30 1µ
IC5 MC34064
C41 100µ
R17 10k
R16 10k
R15 10k
R14 10k
IC1 DSP56004
WSR SCKR SDI0 SDI1 WST SCKT SDO0 SDO1 SDO2
MODC/NMI MODB/IRQB MODA/IRQA RESET
DSCK/OS1 DSI/OS0 DSO DR
EXTAL PCAP PINIT
GPIO0 GPIO1 GPIO2 GPIO3
MRD MWR MCS0 MA17/MCS1/MRAS MA16/MCS2/MCAS MA15/MCS3
MA14 MA13 MA12 MA11 MA10 MA9 MA8 MA7 MA6 MA5 MA4 MA3 MA2 MA1 MA0
TREQ SCK/SCL MISO/SDA SS/HA2 MOSI/HA0
C4 C3 C2 C1 C0
8,192MHz
IC9.5 74HC04
2,04MHz
32kHz
IC9.4 74HC04
C7 0µ22
R11 10k
IC2 27C512
A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13 A14 A15
D0 D1 D2 D3 D4 D5 D6 D7
OE/VPP CE
IC3 HYB 514256 BJ60 DRAM 256kx4
IC4 HYB 514256 BJ60 DRAM 256kx4
CAS RAS WR OE DQ0 DQ1 DQ2 DQ3 NC
C39 * 3n3 R53 15k
C40 * 3n3 R54 15k
CN2.7 Effekt2-Send
CN2.6
CN2.1 Effekt1-Send
CN2.2
C15 10µ
C16 10µ
R20 10k
R21 680k
R22 10k
R23 680k
R24 4k7
R25 4k7
R18 10k
R19 10k
C10 68p
C14 68p
C18 47µ
C17 10n
C20 47µ
C19 10n
IC8 SAA7366
BIR BOR VREFR BIL BOL VREFL VDACP VDACN IREF
SCK SWS SDO CKIN OVLD STD SLAVE SFOR HPEN TEST1 TEST2 VDDD VSSD VDDA VSSA
R26 270R
R27 270R
C21 47µ
C22 10n
R28 33k
C23 0µ022
C46 2µ2
R29 22k
R30 10k
R59 10R
R31 10R
R60 10R
R32 10R
C24 10n
C25 1µ
C26 10n
C27 1µ
IC9.6 74HC04
IC9.1 74HC04
X1 8,1920MHz
R33 12k
C28 100p
C29 100p
IC10.1 74HC74
IC10.2 74HC74
R58 1k
R56 1k
R57 1k
R55 1k
74HC74 74HC04 74HC08
GND
DSP56004
+5V = 6, 9, 17, 28, 33, 40, 48, 53, 70
GND = 1, 8, 10, 15, 21, 29, 31, 34, 44, 52, 54, 66, 72
R39 R40 R41 R42 R43 R44 R45 R46 R47 10k
CN6.1 R49 22R
CN6.2 R50 22R
CN6.4
CN6.3
CN4.6 R69 22R
CN4.5 R68 22R
CN4.4 R67 22R
CN4.3 R51 22R
CN4.2 R52 22R
CN4.1 R48 22R
IC11.1 74HC08
IC11.2 74HC08
IC11.3 74HC08
R36 100R
R37 100R
R38 100R
CN2.12
CN7.1
CN3.2
CN3.1
FL2 22n
FL1 22n
C34 10n
C32 100µ
C33 10n
C31 100µ
C42 470n
C43 3n3
C44 680p
C45 270p
C38 120p
C47 470n
C48 2n2
C49 120p
D8 D1F60
* not assembled
CN3.3 DOWN Fff1
CN3.5 DOWN Fff2
CN3.4 UP Fff1
CN3.6 UP Fff2

ALTERATIONS RESERVED !

ISSUE	REVISION	DATE	NAME
B	56/97	23/9	WWE
A		30/7	WWE

EVI AUDIO DYNACORD

Project name: 80438c

	DATE	NAME
1996		
DSG'D	09.12.	Wendler
CHK'D		
APP'D		

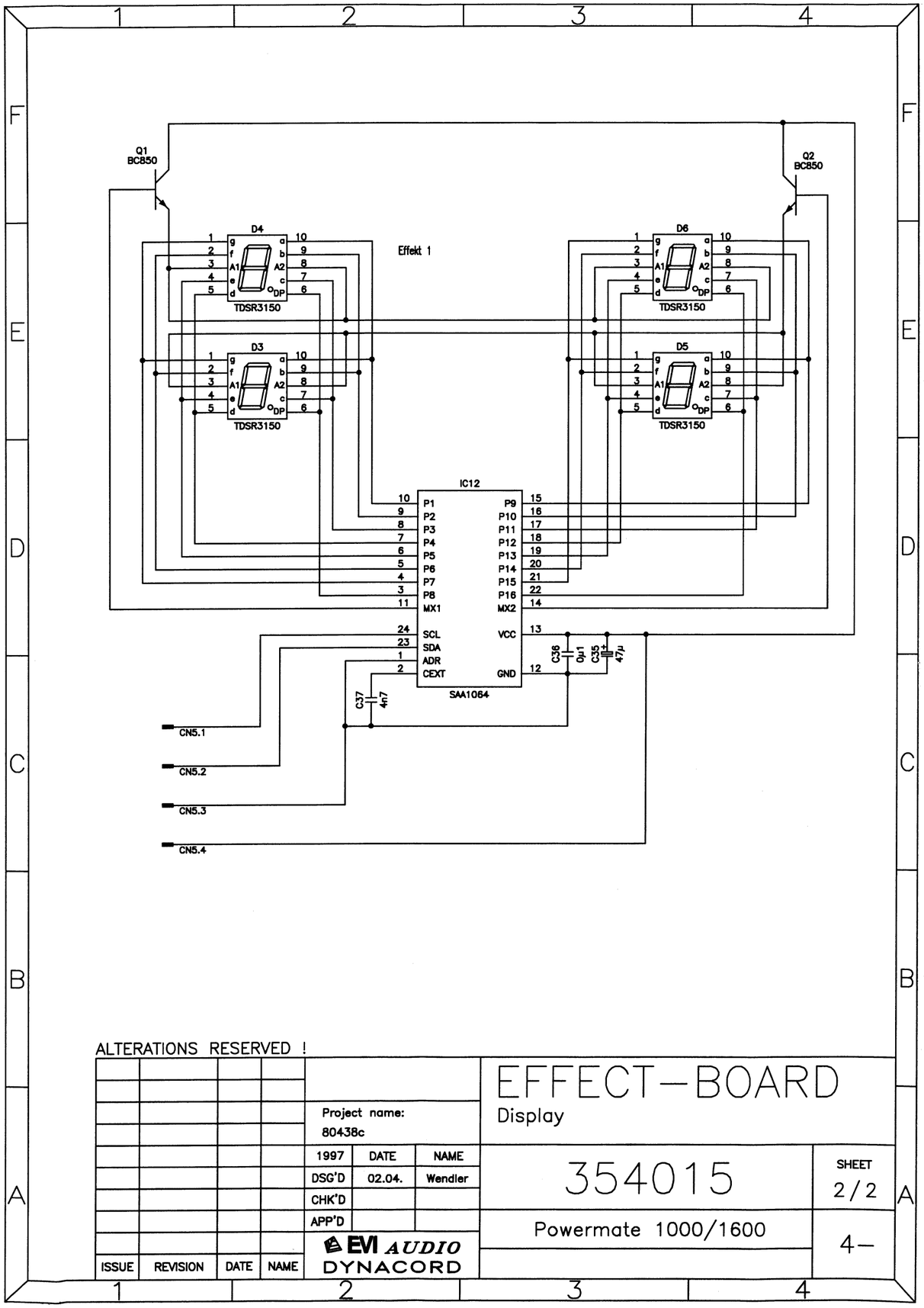
EFFECT-BOARD
AD-DA & DSP

354013

Powermate 1000/1600

SHEET 1/2

3-



ALTERATIONS RESERVED !

ISSUE	REVISION	DATE	NAME

Project name:
80438c

	DATE	NAME
1997		
DSG'D	02.04.	Wendler
CHK'D		
APP'D		

EVI AUDIO
DYNACORD

EFFECT-BOARD

Display

354015

SHEET 2/2

Powermate 1000/1600

4-

Gain min. -10dBu
Gain max. -60dBu
Gain min. +10dBu
Gain max. -40dBu
JS1A
JS2A
JS1B
JS2B
+24V
+U1
-U1
+U2
-U2
+U8
-U8
GAIN
5kZY
VR1A-A
VR1B-A
HI
MID
LOW
VR2A-A
VR2B-A
VR3A-A
VR3B-A
VR4A-A
VR4B-A
50kB
0dBu
DISP1
DISP2
PREFAD1
PREFAD2
NE5532
TL072
I1AA
I2AA
I3AA
I1AB
I2AB
I3AB
I4A-A
I4A-B
I4A-C
I4A-D
LM2901
PEAK
SIGNAL
RED
GREEN
VR6A-A
VR6A-B
VR6B-A
VR6B-B
VR7A-A
VR7B-A
VR8A-A
VR8B-A
-1dBu
+1dB
+10dB
10kAC
20kk
PAN
FX
AUX
MASL
MASR
BUS-REF
CN7-1
CN7-2
CN7-3
CN7-4
CN6-1
CN6-2
CN6-3
CN6-4
CN2-1
CN2-2
CN2-3
CN2-4
+15V
-15V
100µ/25V
1N4148
DISP1
DISP2
ALTERATIONS RESERVED!

Last modified:	18.05.1999 08:25:50	81343C	
Last plotted:	21.05.1999 10:41:39		
	DATE	NAME	
DSG'D			
CHK'D			CIRCUIT DIAGRAM 1/5
APP'D			
B 57/99 18.05 Stangl		EVI AUDIO	354 951 2-
A 4/99 21.01 Stangl			
ISSUE REVISION DATE NAME			

LEFT MONO
JS50A
Gain min. +10dBu
Gain max. -20dBu
STEREO LINE
JS51A
+14dBu
RIGHT
JS50B
LEFT MONO
STEREO LINE
JS51B
+14dBu
RIGHT
GAIN-LINE
HI
MID
LOW
NE5532
I50AA
I51AA
I50AB
I51AB
I52A-A
I52A-B
I52A-C
I52A-D
TL074
DISP1-L
DISP1-R
DISP2-L
DISP2-R
0dBu
+10dB
-10dBu
+4dB
PAN
FX
AUX
MASL
MASR
POSTFAD1
POSTFAD2
PREFAD7
PREFAD8
BUS-REF
I53AA
I54AA
I53AB
I54AB
10kAC
10kA
20kK
20kk
I55A-A
I55A-B
I55A-C
I55A-D
LM2901
PEAK
SIGNAL
RED
GREEN
1N4148
+U6
-U6
+17V
-17V
+UB
-UB

ALTERATIONS RESERVED!

ISSUE	REVISION	DATE	NAME
B	57/99	18.05	Stangl
A	1/99	21.01	Stangl

Last modified: 18.05.1999 08:25:50
Last plotted: 21.05.1999 10:41:54

	DATE	NAME
DSG'D		
CHK'D		
APP'D		

EVI AUDIO

81343C

CIRCUIT DIAGRAM 2/5

354 951 2-

NOTES:

- AC VOLTAGE 1000 HZ, MEASURED WITH VTVM
- DC VOLTAGE MEASURED WITH VOLTMETER 100kOHM/V
- FADER IN RATED POSITION
  ADDITIONAL GAIN WITH FADER IN MAX. POSITION

RATED CONDITIONS: GAIN POTS MIN. OR MAX.
ALL POTS IN CENTER-POSITION
ALL FADERS AT 0dB
FX 1/2 Prog. 00 00

DUAL DIGITAL EFFECTS UNIT

SAFETY COMPONENT
(MUST BE REPLACED BY ORIGINAL PART)

NE5532 TL072 — LM2901 — BC550 — J111

ISSUE	REVISION	DATE	NAME
B	57/99	18.05	Stangl
A	4/99	21.01	Stangl

EVI AUDIO

Last modified 18.05.1999 08:25:50
Last plotted 21.05.1999 10:42:09

1998	DATE	NAME
DSG'D	12/98	Lang
CHK'D		
APP'D		

81343C

CIRCUIT DIAGRAM

354 951

2-

T 1
MAINS TRANSFORMER
230V - DCN 354 955
100V - DCN 354 868
120/240V - DCN 356 592

PTC - TRANSFORMER

IDLE CURRENT L

IDLE CURRENT R

LIMITLED

LIMABC-A

LIMABC-B

LEFT 300W 34,7V +33dBu

RIGHT 300W 34,7V +33dBu

RELAYDR1

TIME_IN

POWER ON SWITCH

INRUSH LIMITER

PRIMARY POSITION

84192/2
220V - 240V
T6,3A/250V
302 573

84196/2
100V - 120V
T12,5A/250V
343275

FAN
348 415

SAFETY COMPONENT, FLAMEPROOF RESISTOR (MUST BE REPLACED BY ORIGINAL PART)

POWER RESISTOR 4 WATT

AC VOLTAGE 1000 HZ, MEASURED WITH VTVM

DC VOLTAGE MEASURED WITH VOLTMETER 100kOHM/V

AC VOLTAGE 50/60 HZ MEASURED VOLTMETER 2000 OHMS/V

LM 7805 — LM 317 T — LM 337 T — MJE 15030, MJE 15031, 2SC 4793, BD 241 — MJE 340, MJE 350 — BC 327, BC 337, BC 550, BC 560, BC 618 — MPSA 42, MPSA 92, 2N 3904, 2N 9306, BF 393 — J 111 — NE 5532, CA 3080, OP 97 FP — TL 074 — MJ 15003, MJ 15004

230V - 240V 84192/1
100V - 120V 84196/1

ALTERATIONS RESERVED!

				Last modified 29.04.1999 14:39:08	84192C
				Last plotted 21.05.1999 10:39:57	
				1998 DATE NAME	CIRCUIT DIAGRAM
				DSG'D 12.10 Strangl	
				CHK'D	
				APP'D	
B	15 / 98	02/98	Strangl	EVI AUDIO	354 953
	Nullserie	01/98	Strangl		PowerMate 600
ISSUE	REVISION	DATE	NAME		2-

T 1
MAINS TRANSFORMER
230V - DCN 354 955
100V - DCN 356 865
120-240V - DCN 356 592

PTC - TRANSFORMER

SAFETY COMPONENT, FLAMEPROOF RESISTOR (MUST BE REPLACED BY ORIGINAL PART)
POWER RESISTOR 4 WATT
AC VOLTAGE 1000 HZ, MEASURED WITH VTVM
DC VOLTAGE MEASURED WITH VOLTMETER 100kOHM/V
AC VOLTAGE 50/60 HZ MEASURED VOLTMETER 2000 OHMS/V

LM 7805 · LM 317 T · LM 337 T · MJE 15030 MJE 15031 2SC 4793 BD 241 · MJE 340 MJE 350 · BC 327 BC 337 BC 550 BC 560 BC 618 · MPSA 42 MPSA 92 2N 3904 2N 3906 BF 393 · J 111 · NE 5532 CA 3080 OP 97 FP · TL 074 · MJ 15003 MJ 15004

230V - 240V 84192/1
100V - 120V 84196/1

ALTERATIONS RESERVED!

ISSUE	REVISION	DATE	NAME
E	53/00	04/00	Stangl
D	157 / 99	12/99	Lang
C	145 / 98	11/98	Lang
B	15 / 98	02/98	Stangl
	Nullserie	01/98	Stangl

Last modified: 05.06.2000 12:17:08
Last plotted: 08.06.2000 11:31:02

1998	DATE	NAME
DSG'D	12.10	Stangl
CHK'D		
APP'D		

EVI AUDIO

84192d

CIRCUIT DIAGRAM

354 953

PM600 / PSX600

2-

MONO CHANNELS

MIC
+24V
GAIN
LF +/-
MF +/-
HF +/-
PEAK
SIGNAL
AUX
CHANNEL VOLUME
3 BAND EQ
PAN
FX
LINE

STEREO CHANNELS

L/MONO
STEREO LINE
TRIM
LF +/-
MF +/-
HF +/-
PEAK
SIGNAL
AUX
3 BAND EQ
CHANNEL VOLUME
BAL
FX
R

MASTER L
MASTER R
AUX
FX

Σ FX

FX1 to AUX
FX1 RETURN
FX1 ON
FX2 to AUX
FX2 RETURN
FX2 ON

DUAL STEREO EFFECTS
FX1
FX2
UP DOWN UP DOWN
FOOTSWITCH FX1/FX2
PEAK FX2
PEAK FX1

REC. SEND
L
MASTER FADER L
MASTER L
PHONES
VOLUME
STANDBY
MASTER R
MASTER FADER R
R
REC. SEND

2 TRACK RETURN L
2 TRACK to MASTER
2 TRACK RETURN R
2 TRACK to AUX

MONO
MONO FADER
MONO OUT

7 BAND EQ
BAND EQ
+/- +/- +/- +/- +/- +/- +/-
METER
MAIN OUTPUT L
MAIN OUTPUT R

AUX
PRE
AUX SEND
STANDBY
AUX SEND

POWER AMP INPUT L
POWER AMP INPUT R
fc=70Hz
LO-CUT FILTER 12dB/oct.
POLE-ZERO COMPENSATION
PROCESSOR
LIMIT
LIMIT DISPLAY
PWR AMP L
PWR AMP R
TURN ON DELAY
PROTECTION
DC
HF
SOA
TEMP
PROTECT
POWER ON
MAINS VOLTAGE
50 - 60 Hz
RELAY
SPEAKER L
SPEAKER R

POWER AMPLIFIER
2x300 WATTS

ISSUE	REVISION	DATE	NAME

Last modified: 25.05.2000 11:02:48
Last plotted: 30.05.2000 16:00:10

	DATE	NAME
DSG'D	10.98	Taffner
CHK'D		
APP'D		

EVI AUDIO

PM600BLOCK

CIRCUIT DIAGRAM 1/1

XXX XXX

PM600 2-